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Surveys Through  
Aerospace  
Remote Sensing

## Soil Moisture

March 1982

A COMPARISON OF SOIL MOISTURE CHARACTERISTICS PREDICTED  
BY THE ARYA-PARIS MODEL WITH LABORATORY-MEASURED DATA

L. M. Arya, J. C. Richter, and S. A. Davidson

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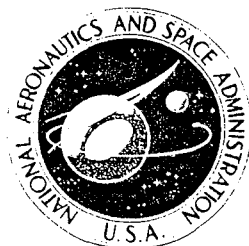
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16. Abstract  Soil moisture characteristics predicted by the Arya-Paris model were compared with the laboratory-measured data for 181 New Jersey soil horizons. For a number of soil horizons, the predicted and the measured moisture characteristic curves are almost coincident; for a large number of other horizons, despite some disparity, their shapes are strikingly similar.  Uncertainties in the model input and laboratory measurement of the moisture characteristic are indicated, and recommendations for additional experimentation and testing are made.					
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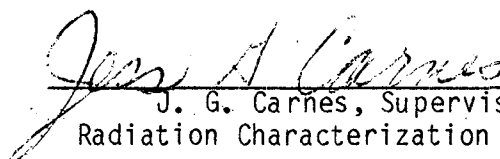
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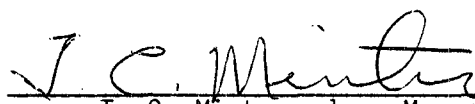
This report describes Profile Modeling activities of the  
Soil Moisture project of the AgRISTARS program.

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For

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Space and Life Sciences Directorate  
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
LYNDON B. JOHNSON SPACE CENTER  
HOUSTON, TEXAS

March 1982

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## PREFACE

The Agriculture and Resources Inventory Surveys Through Aerospace Remote Sensing is a multiyear program of research, development, evaluation, and application of aerospace remote sensing for agricultural resources, which began in fiscal year 1980. This program is a cooperative effort of the U.S. Department of Agriculture, the National Aeronautics and Space Administration, the National Oceanic and Atmospheric Administration (U.S. Department of Commerce), the Agency for International Development (U.S. Department of State), and the U.S. Department of the Interior.

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## 1. INTRODUCTION

The Arya-Paris model (ref. 1) predicts the moisture characteristic of a soil from its particle-size distribution and bulk density in the natural state of packing. The prediction is essentially a translation of the particle-size distribution curve into a moisture characteristic curve. In the process, both the volumetric water content and the soil water pressure are predicted. Initial tests of the model were made on a limited data set and consisted of comparisons of predicted curves with experimentally determined curves (ref. 1). Visually, the agreement between the two types of data appeared to vary widely. Since the model predicts both the soil water pressure and the soil water content, a computed data pair has uncertainty in both quantities. The measured data, on the other hand, consist of water content values for preset soil water pressures; thus, they exhibit uncertainty in one dimension only. This lack of correspondence between the measured and the predicted data pairs made an objective statistical comparison of the two difficult.

While the need for an objective procedure to test the performance of the model continues to exist, it is hoped that a subjective comparison of the predicted-versus-measured curves for a large number of soil materials will provide insight into the efficacy of the model.

This document presents the predicted and measured moisture characteristics for 181 New Jersey soil horizons. Also included in this document are a brief outline of the model, an example of the computational procedure, and a Fortran program for processing large data sets.





## 2. THE MODEL

The Arya-Paris model of the soil moisture characteristic is based on the assumption that a soil moisture characteristic curve is essentially a pore-size distribution curve. It also contends that the pore-size distribution in a soil material is determined primarily by the particle-size distribution and bulk density of the sample. Thus, given the particle-size distribution and bulk density data, the following steps are used to translate a particle-size distribution curve into a moisture characteristic curve.

The cumulative particle-size distribution curve (see fig. 1 for an example) is divided into  $n$ -size intervals, and the solid mass  $W_i$  for each size interval is computed. The differences in cumulative percentages corresponding to successive particle sizes divided by 100 result in values of  $W_i$  such that the sum of all  $W_i$  is unity. The pore volume associated with each size fraction is then computed by

$$V_{v_i} = (W_i / \rho_p) e ; \quad i = 1, 2, \dots, n \quad (1)$$

where  $V_{v_i}$  is the pore volume associated with the solid mass in the  $i^{\text{th}}$  particle-size range,  $\rho_p$  is the particle density, and  $e$  is the void ratio given by

$$e = (\rho_p - \rho_b) / \rho_b \quad (2)$$

where  $\rho_b$  is the measured bulk density of the natural-structure sample.

The pore volumes  $V_{v_i}$  generated by each size fraction are progressively accumulated and considered filled with water. The volumetric water content is then computed by

$$\theta_{v_i} = \sum_{j=1}^{j=i} V_{v_j} / V_b ; \quad i = 1, 2, \dots, n \quad (3)$$

where  $\theta_{v_i}$  is the volumetric water content represented by a pore volume for which the largest size pore corresponds to the upper limit of the  $i^{\text{th}}$  particle-size range, and  $V_b$  is the sample bulk volume given by

$$V_b = 1/\rho_b \quad (4)$$

An average volumetric water content corresponding to the midpoint of a given particle-size range is given approximately (if size intervals are small) by

$$\bar{\theta}_{v_i} = (\theta_{v_i} + \theta_{v_{i+1}})/2 \quad (5)$$

The pore radius  $r_i$  for the assemblage formed by the particles in the  $i^{\text{th}}$  particle-size range is given by

$$r_i = R_i \left[ 4en_i^{(1-\alpha)} / 6 \right]^{1/2} \quad (6)$$

where  $r_i$  is the mean pore radius,  $R_i$  is the mean particle radius, and  $n_i$  is the number of spherical particles given by

$$n_i = 3W_i / 4\rho_p \pi R_i^3 \quad (7)$$

The parameter  $\alpha$  in equation (6) is an empirical constant with an average value of about 1.38. (See reference 1.)

Once the pore radii are obtained, they are converted to equivalent soil water pressures by the equation of capillarity,

$$\psi_i = 2\gamma \cos \delta / \rho_w g r_i \quad (8)$$

where  $\psi_i$  is the soil water pressure,  $\gamma$  is the surface tension of water,  $\delta$  is the contact angle,  $\rho_w$  is the density of water,  $g$  is the acceleration due to gravity, and  $r_i$  is the pore radius.

### 3. NEW JERSEY SOILS DATA

Particle-size distribution, bulk density, and measured moisture characteristic data for 181 New Jersey soil horizons were obtained from Soil Survey Investigations Report No. 26 (ref. 2). The particle density for all soils was assumed to be constant at a value of 2.65 grams per cubic centimeter. An example of the New Jersey soils data and the laboratory methods used in data collection are given in tables 1 and 2, respectively. All 181 soil horizons are serially listed and described in table 4.

TABLE 1.- AN EXAMPLE OF THE SOIL SURVEY INVESTIGATIONS REPORT CONSISTING OF PARTICLE-SIZE DISTRIBUTION, BULK DENSITY, LABORATORY-MEASURED MOISTURE CHARACTERISTICS, AND OTHER SOILS DATA

[From reference 2; water retention data are based on gravimetric measurements.]

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Sand (2-0.05)															Silt (0.05-0.002)															Clay (= 0.002)															Very coarse (2-1)															Coarse (1-0.5)															Medium (0.5-0.25)															Fine (0.25-0.1)															Very fine (0.1-0.05)															0.05-0.02															0.02-0.002															Int. III (0.2-0.02)															Int. 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TABLE 1.- Concluded.

Pedon Classification: Aquic Hapludult; fine-loamy, mixed, mesic  
 Soil: Mattapex taxadjunct <sup>1/</sup>  
 Soil No.: S58NJ-12-2  
 Location: Middlesex County, New Jersey. 1 mile east of Plainsboro, south of Plainsboro-Cranbury Road, west of crossing of high tension line distance of 13 utility poles, in field about 225 feet; Britton farm.  
 Vegetation and land use: Cropped for potatoes for over 15 years and then, the last 6 years, for potatoes alternating with wheat. Wheat stubble plowed under during past autumn.  
 Slope and land form: 1 percent.  
 Drainage: Moderately well drained.  
 Permeability: Moderately slow.  
 Parent material: Silty and very fine sandy materials on broad, upland, very gently sloping sections of the coastal plain.  
 Described by: G. Quakenbush

Horizon and  
 Beltsville  
 Lab. No.

Ap 59263	0 to 10 inches. Dark brown (10YR 4/3) silt loam; massive breaking to weak fine granular structure friable; abrupt smooth boundary. 8 to 10 inches thick.
B21t 59264	10 to 13 inches. Strong brown (7.5YR 4/6) silt loam; weak thin to medium platy structure, also vertical irregular jointing of undetermined spacing; friable; concentration of fine roots in joints; clay films on peds; clear wavy boundary. 7 to 13 inches thick.
B22t 59265	13 to 20 inches. Strong brown (7.5YR 4/6) silt loam; weak or moderate medium or coarse subangular blocky structure; friable, slightly sticky; clay films are weak; clear wavy boundary. 7 to 13 inches thick.
B23t 59266	20 to 24 inches. Strong brown (7.5YR 4/6) silt loam; few to common fine faint mottles; massive breaking to weak coarse subangular blocks; firm in place; slight clay films; clear wavy boundary. 4 to 10 inches thick.
B24t 59267	24 to 31 inches. Strong brown (7.5YR 5/6) silt loam; common or many distinct light brownish gray (10YR 6/2) matter; weak coarse subangular blocky structure; firm in place, friable removed; sand constituent is fine or very fine; clear wavy boundary. 6 to 8 inches thick.
IIC1 59268	31 to 39 inches. Dark brown (7.5YR 4/4) gravelly loamy sand; weakly stratified; firm to loose.
IIC2 Not sampled	39 inches plus. Strong brown (7.5YR 5/6) gravelly sand; weakly stratified; loose.

Notes: Colors refer to moist soil.

<sup>1/</sup> This pedon is a taxadjunct because its family particle size class is fine-loamy, as opposed to fine-silty for the Mattapex series.

TABLE 2.- METHODS OF ANALYSES USED BY THE SOIL SURVEY LABORATORIES

[From reference 2]

METHODS CODE SYMBOLS, SOIL SURVEY LABORATORIES

1. SAMPLE COLLECTION AND PREPARATION
  - A. Field sampling
    1. Site selection
    2. Soil sampling
      - a. Stony soils
  - B. Laboratory preparation
    1. Standard (airdry)
      - a. Square-hole 2-mm sieve
      - b. Round-hole 2-mm sieve
    2. Field moist
2. CONVENTIONS
  - A. Size-fraction base for reporting
    1. <2-mm
    2. < size specified
  - B. Data sheet symbols
 

tr: trace, not measurable by quantitative procedure used or less than reportable amount

- : analysis run but none detected

blank: analysis not run

nd: analysis not run

< : less than reported amount or none present
3. PARTICLE-SIZE ANALYSES
  - A. Particles <2-mm (pipet method)
    1. Airdry samples
      - a. Carbonate and noncarbonate clay
    2. Moist samples
      - a. Carbonate and noncarbonate clay
  - B. Particles >2-mm
    1. Weight estimates
      - a. By field and laboratory weighing
4. FABRIC-RELATED ANALYSES
  - A. Bulk density
    1. Saran-coated clods
      - a. Field state
      - b. Airdry
      - f. 1/3-bar desorption III
      - g. 1/10-bar desorption
      - h. Owendry
    3. Cores
      - a. Field moist
  - B. Water retention
    1. Pressure-plate extraction
4. FABRIC RELATED ANALYSES (con.)
  - (1/3 or 1/10-bar)
    - a. Sieved samples
    - b. Soil pieces
    - c. Natural clods
    - d. Cores
  2. Pressure membrane extraction (15-bars)
    - a. Field-moist samples
  4. Field state
  - C. Water-retention difference
    1. 1/3-bar to 15-bars
    2. 1/10-bar to 15-bars
  - D. Linear extensibility
    1. Dry to moist
5. ION-EXCHANGE ANALYSES
  - A. Cation-exchange capacity
    1.  $\text{NH}_4\text{OAc}$ , pH 7.0
      - a. Direct distillation
      - b. Displacement distillation
    3. Sum of cations
      - a. Acidity by  $\text{BaCl}_2\text{-TEA}$ , pH 8.2; bases by  $\text{NH}_4\text{OAc}$ , pH 7.0
  - B. Extractable bases
    1.  $\text{NH}_4\text{OAc}$  extraction
      - a. Uncorrected
    4.  $\text{NH}_4\text{OAc}$ , pH 7.0 (modified)
      - a. Uncorrected
  - C. Base saturation
    3. Sum of cations
6. CHEMICAL ANALYSES
  - A. Organic carbon
    1. Acid-dichromate digestion
      - a.  $\text{FeSO}_4$  titration
  - B. Nitrogen
    1. Kjeldahl digestion
      - a. Ammonia distillation
    2. Semimicro Kjeldahl
      - a. Ammonia distillation
  - C. Iron
    1. Dithionite extraction
      - a. Dichromate titration
    5. Sodium pyrophosphate extraction
      - a. Atomic absorption
  - E. Calcium carbonate
    1. HCl treatment
      - a. Gas volumetric
6. CHEMICAL ANALYSES (con.)
  - c. Weight loss
  - G. Aluminum
    5. Sodium pyrophosphate extraction
      - a. Atomic absorption
  - H. Extractable acidity
    1.  $\text{BaCl}_2$ -triethanolamine I
      - a. Back-titration with HCl
    2.  $\text{BaCl}_2$ -triethanolamine II
      - a. Back-titration with HCl
  - N. Calcium
    2.  $\text{NH}_4\text{OAc}$  extraction
      - b. Oxalate-permanganate I
      - d. Oxalate-cerate
  - O. Magnesium
    2.  $\text{NH}_4\text{OAc}$  extraction
      - a. EDTA-alcohol separation
      - b. Phosphate titration
      - c. Gravimetric,  $\text{Mg}_2\text{P}_2\text{O}_7$
  - P. Sodium
    2.  $\text{NH}_4\text{OAc}$  extraction
      - a. Flame photometry
  - Q. Potassium
    2.  $\text{NH}_4\text{OAc}$  extraction
      - a. Flame photometry
7. MINERALOGY
  - A. Instrumental analysis
    1. Preparation
      - b. Organic-matter removal
      - c. Iron removal
      - d. Particle-size fractionation
    2. X-ray diffraction
      - a. Thin film on glass solution
    3. Differential thermal analysis
8. MISCELLANEOUS
  - C. pH
    1. Soil suspensions
      - a. Water dilution
      - b. Saturated paste
      - c. KCl
      - e.  $\text{CaCl}_2$
  - D. Ratios and estimates
    1. To total clay
    3. Ca to Mg (extractable)

UNCODED METHODS, RUTGERS UNIVERSITY

Property	Units	Method	Ref.--Am. Soc. of Agron., No. 9, Methods of Soil Analysis
Bulk density	g/cc	Soil cores, 3x3 in. taken at or slightly below field capacity as in 4A3a above.	Part 1, Chapter 40
Water retention bars or atmos.	Pct. oven dry (105° C) wt.	Saturated soil cores equilibrated at indicated suction.	Part 1, Chapters 8 and 21
0.02, 0.06, 0.10, 0.33		On tension table using asbestos membrane. In pressure membrane apparatus.	Part 1, Chapter 8
1.0		Saturated crushed soil sample equilibrated at indicated suction. In pressure membrane apparatus.	Part 1, Chapter 8
2.0, 6.0, 15			
Available water	In. of water per in. of soil	(Pct. water at field capacity — Pct. water at 15 bar) x bulk density	Part 1, Chapter 19
Field capacity	Pct. (wt.)	Water content of field samples 24 to 48 hrs. after wetting of whole soil profile by rainfall.	Part 1, Chapter 19
Hydraulic conductivity	In. per hr.	Constant head (1 in. water) "permeameter" using saturated cores and 30 min. measurement periods until rate (V/T) becomes constant.	Part 1, Chapter 19
Porosity: Noncapillary	Pct. (vol.)	Pct. (vol.) total pore space—pct. (vol.) water at 0.06 bar tension	Part 1, Chapter 21
Capillary		Pct. (vol.) total pore space—pct. (vol.) noncapillary porosity	
Total		Pct. (vol.) water retained at 0 bars suction: saturated	
Aggregate stability		Yoder method, 0.5 mm lower limit	Soil Sci. 1949. Vol. 68(1)

TABLE 4.- NEW JERSEY SOILS FOR WHICH MEASURED AND PREDICTED MOISTURE  
CHARACTERISTIC DATA ARE COMPARED

Soil horizon		Depth, in.	Soil series	Page numbers in ref. 2	Soil survey code	Location, county
Number	Name					
1	Ap	0-9	Not designated	10-11	S59NJ-13-1	Monmouth
2	B1t	9-12				
3	B21t	12-18				
4	B22t	18-25				
5	B31t	25-29				
6	B32	29-35				
7	C	35-81				
8	Ap	0-10	Not designated	12-13	S58NJ-3-3	Burlington
9	A2	10-23				
10	B2t	23-30				
11	B3	30-38				
12	C1	38-42				
13	IIC2	42-48				
14	IVC4	52-60				
15	Ap	0-6	Not designated	18-19	S58NJ-8-6	Gloucester
16	A2	6-9				
17	B21t	9-18				
18	IIB22t	18-28				
19	IIB23t	28-60				
20	AB	11-14	Not designated	22-23	S60NJ-11-1	Mercer
21	Ap	0-11				
22	B2t	14-21				
23	B31	21-28				
24	B32, B33	28-34				
25	IIC	34-42				
26	Ap	0-10	Downer sandy loam	54-55	S58NJ-8-7	Gloucester
27	A2	10-16				
28	B1t	16-23				
29	B2t	23-30				
30	IIC1	30-48				
31	IIC2	48-60				
32	Ap	0-8	Downer loamy sand	56-57	S59NJ-5-1	Cape May
33	A3	15-21				
34	B2t	21-30				
35	B3t	30-34				
36	IIC1	34-37				
37	Ap2	6-11	Downer sandy loam	58-59	S59NJ-6-1	Cumberland
38	A2	11-17				
39	B2t	17-31				
40	B3t	31-37				
41	IIC1	37-46				
42	Ap	0-10	Not designated	6-7	S60NJ-4-2	Camden
43	A2	10-18				
44	B1t	18-22				
45	B2t	22-28				
46	B3t	28-33				

TABLE 4.- Continued.

Soil horizon		Depth, in.	Soil series	Page numbers in ref. 2	Soil survey code	Location, county
Number	Name					
47	Ap	0-10	Matapeake silt loam	84-85	S58NJ-12-1	Middlesex
48	A2, B1	10-12				
49	B21t	12-21				
50	B22t	21-27				
51	IIC1	27-34				
52	IIIC2	34-40				
53	Ap	0-9	Mattapex taxadjunct	88-89	S57NJ-12-2	Middlesex
54	A2	9-12				
55	B21t	12-19				
56	B3	22-28				
57	IIC1	28-34				
58	Ap	0-10	Mattapex taxadjunct	92-93	S58NJ-12-2	Middlesex
59	B21t	10-13				
60	B22t	13-20				
61	B23t	20-24				
62	B24t	24-31				
63	IIC1	31-39				
64	A11, A12	0-4	Galestown loamy sand	100-101	S58NJ-3-1	Burlington
65	A2	4-26				
66	B1t	26-32				
67	B2t	32-40				
68	IIC1	40-62				
69	A11, A12	0-5	Galestown loamy sand	102-103	S58NJ-3-2	Burlington
70	A2	5-27				
71	B1t	27-36				
72	B2t	36-48				
73	C	48-60				
74	A'2	3-14	Evesboro sand	24-25	S58NJ-5-3	Cape May
75	A1, A2, B2	0-3				
76	B'1	14-25				
77	B'2	25-36				
78	C	36-48				
79	A1, A2	0-7	Colts Neck taxadjunct	34-35	S59NJ-13-4	Monmouth
80	B1	7-18				
81	B2t	18-27				
82	B3t	27-33				
83	C	33-48				
84	A2	1-3	Colts Neck taxadjunct	36-37	S59NJ-13-3	Monmouth
85	B1	3-8				
86	B21t	8-17				
87	B22t	17-25				
88	C1	25-48				
89	A'2	0-1.5	Aura taxadjunct	38-39	S58NJ-8-1	Gloucester
90	A1, A2, B	1.5-11				
91	B'21t	11-16				
92	B'22t	16-30				
93	IIIB'24t	30				



TABLE 4.- Continued.

Soil horizon		Depth, in.	Soil series	Page numbers in ref. 2	Soil survey code	Location, county
Number	Name					
94	A1	0-4.5	Freehold taxadjunct	40-41	S56NJ-3-1	Burlington
95	A2	4.5-12				
96	B1	12-20				
97	B2t	20-30				
98	B3t	30-36				
99	IIC2	38-42				
100	IIIC3	42-63				
101	A11, A12, A13	0-5	Matapeake taxadjunct	42-43	S57NJ-12-1	Middlesex
102	A2	5-13				
103	B21t	13-21				
104	B22tg	21-31				
105	IIC	31-63				
106	A'2	0.5-1	Downer sandy loam	44-45	S57NJ-8-1	Gloucester
107	A2	1.5-11				
108	B'21t	11-18				
109	B'22t	18-25				
110	B'23t	25-32				
111	A1	0-1.5	Downer sandy loam	46-47	S57NJ-8-2	Gloucester
112	A'2	1.5-14				
113	B'21t	14-24				
114	B'22t	24-32				
115	IIC2	32-66				
116	A'2	4-13	Downer loamy sand	48-49	S57NJ-8-3	Gloucester
117	B't	13-24				
118	IIC2	30-46				
119	A2	2-13	Downer loamy sand	50-51	S58NJ-5-1	Cape May
120	A3	13-19				
121	B1	19-21				
122	B2t	21-28				
123	B3t	28-32				
124	C1	32-38				
125	C2	38-43				
126	AP1, AP2	0-7	Downer loamy sand	52-53	S58NJ-5-2	Cape May
127	A2	7-16				
128	B1	16-19				
129	B2t	19-27				
130	B3t	27-37				
131	A1	0-3	Sassafras taxadjunct	60-61	S58NJ-6-1	Cumberland
132	A2	3-12				
133	B1	12-23				
134	B2t	23-33				
135	B3	33-37				
136	IIC	37-48				
137	B1t	17-23	Westphalia taxadjunct	62-63	S59NJ-4-1	Camden
138	B2t	23-34				

TABLE 4.- Concluded.

Soil horizon		Depth, in.	Soil series	Page numbers in ref. 2	Soil survey code	Location, county
Number	Name					
139	A'2	2-9	Aura coarse sandy loam	64-65	S58NJ-8-2	Gloucester
140	A1, A2, B	0-2				
141	B'1t	9-13				
142	IIB'21t	13-19				
143	A'2	4-10	Aura sandy loam	66-67	S58NJ-8-3	Gloucester
144	B'1	10-15				
145	B'21t	15-22				
146	A1, A2, B	0-4				
147	IIB'22t	22-27				
148	A1	0-5	Freehold sandy loam	74-75	S56NJ-3-2	Burlington
149	A2	5-14				
150	B1	14-21				
151	B2t	21-34				
152	B3t	34-41				
153	IIC	41-108				
154	A'21	1-8	Freehold sandy loam	76-77	S57NJ-13-1	Monmouth
155	A'22	8-13				
156	A'3	13-16				
157	B'21t	16-23				
158	B'22t	23-28				
159	B'3t	28-38				
160	IIC1	38-44				
161	A1	0-3	Matapeake taxadjunct	80-81	S57NJ-11-1	Mercer
162	A2	3-13				
163	B1	13-16				
164	B21t	16-20				
165	B22t	20-25				
166	B3t	25-29				
167	IIC	29-40				
168	A1	0-4	Matapeake taxadjunct	82-83	S57NJ-12-3	Middlesex
169	A2	4-11				
170	B1t	11-18				
171	B2t	18-28				
172	IIC1	28-38				
173	IIC2	38-50				
174	A1	0-4	Westphalia taxadjunct	94-95	S59NJ-8-1	Gloucester
175	A21	4-17				
176	A22	17-26				
177	Bt	26-36				
178	A1	0-5	Westphalia taxadjunct	96-97	S59NJ-3-2	Burlington
179	A2	5-23				
180	B2t	23-31				
181	B3t	31-39				

#### 4. COMPUTATIONAL PROCEDURE

An example of the computational steps involved in the application of the Arya-Paris model is given in table 3. The soil sample used in the example represents horizon B23t (20- to 24-inch depth) of a New Jersey soil described in table 1. Particle-size distribution and bulk density data for this horizon are given in figure 1. Measured and predicted moisture characteristics are compared in figure 2.

A Fortran program was developed to carry out the computational procedure using the New Jersey soils data. A listing of the program and the execute file are given in appendix A. The program utilizes the International Mathematical and Statistical Libraries (IMSL) subroutine IQHSCU to fit a quasi-cubic Hermite polynomial to the particle-size data. The model is then used to compute soil water pressure and water content. The program output is given in appendix B.

TABLE 3.- AN EXAMPLE<sup>a</sup> OF THE COMPUTATIONAL PROCEDURE FOR THE ARYA-PARIS  
MODEL OF THE MOISTURE CHARACTERISTIC

$$\left[ \begin{array}{l} V_b = 0.5917 \text{ cm}^3; e = 0.56805; \gamma = 72.0 \text{ dynes/cm}; \cos \delta = 1; \\ \rho_w = 1.0 \text{ g/cm}^3; g = 980 \text{ cm/sec}^2; \alpha = 1.38 \end{array} \right]$$

Particle-diameter interval, $\mu\text{m}$	$W_i$ , g	$V_{vi}$ , $\text{cm}^3$	$\sum_{j=1}^{j=i} V_{vj}$ , $\text{cm}^3$	$\theta_{vi}$ , $\text{cm}^3/\text{cm}^3$	$\bar{\theta}_{vi}$ , $\text{cm}^3/\text{cm}^3$	$n_i$	$n_i^{(1-\alpha)}$	$r_i$ , cm	$\psi_i$ , -cm
0-1	0.140	0.03001	0.03001	0.051					
1-2	0.030	0.00643	0.03644	0.062	0.057	$6.41 \times 10^9$	$1.88 \times 10^{-4}$	$6.33 \times 10^{-7}$	$2.32 \times 10^5$
2-5	0.074	0.01586	0.05230	0.088	0.075	$1.24 \times 10^9$	$3.50 \times 10^{-4}$	$2.01 \times 10^{-6}$	$7.31 \times 10^4$
5-10	0.076	0.01629	0.06859	0.116	0.102	$1.30 \times 10^8$	$8.25 \times 10^{-4}$	$6.63 \times 10^{-6}$	$2.22 \times 10^4$
10-20	0.115	0.02465	0.09324	0.158	0.137	$2.46 \times 10^7$	$1.55 \times 10^{-3}$	$1.82 \times 10^{-5}$	$8.07 \times 10^3$
20-30	0.120	0.02572	0.11896	0.201	0.180	$5.54 \times 10^6$	$2.74 \times 10^{-3}$	$4.03 \times 10^{-5}$	$3.65 \times 10^3$
30-50	0.160	0.03430	0.15326	0.259	0.230	$1.80 \times 10^6$	$4.20 \times 10^{-3}$	$7.98 \times 10^{-5}$	$1.84 \times 10^3$
50-100	0.100	0.02144	0.17470	0.295	0.277	$1.71 \times 10^5$	$1.03 \times 10^{-2}$	$2.34 \times 10^{-4}$	$6.28 \times 10^2$
100-200	0.065	0.01393	0.18863	0.319	0.307	$1.39 \times 10^4$	$2.66 \times 10^{-2}$	$7.53 \times 10^{-4}$	$1.95 \times 10^2$
200-500	0.070	0.01501	0.20364	0.344	0.332	$1.20 \times 10^3$	$6.76 \times 10^{-2}$	$2.80 \times 10^{-3}$	$5.25 \times 10^1$
500-700	0.020	0.00429	0.20793	0.351	0.348	$1.00 \times 10^2$	$1.74 \times 10^{-1}$	$7.70 \times 10^{-3}$	$1.91 \times 10^1$
700-1000	0.015	0.00322	0.21115	0.357	0.354	$1.76 \times 10^1$	$3.36 \times 10^{-1}$	$1.52 \times 10^{-2}$	$9.67 \times 10^0$
1000-2000	0.015	0.00322	0.21437	0.362	0.360	$3.20 \times 10^0$	$6.43 \times 10^{-1}$	$3.70 \times 10^{-2}$	$3.97 \times 10^0$

<sup>a</sup>The example is for soil horizon B23t of a New Jersey soil described in table 1. Input data are shown in figure 1.

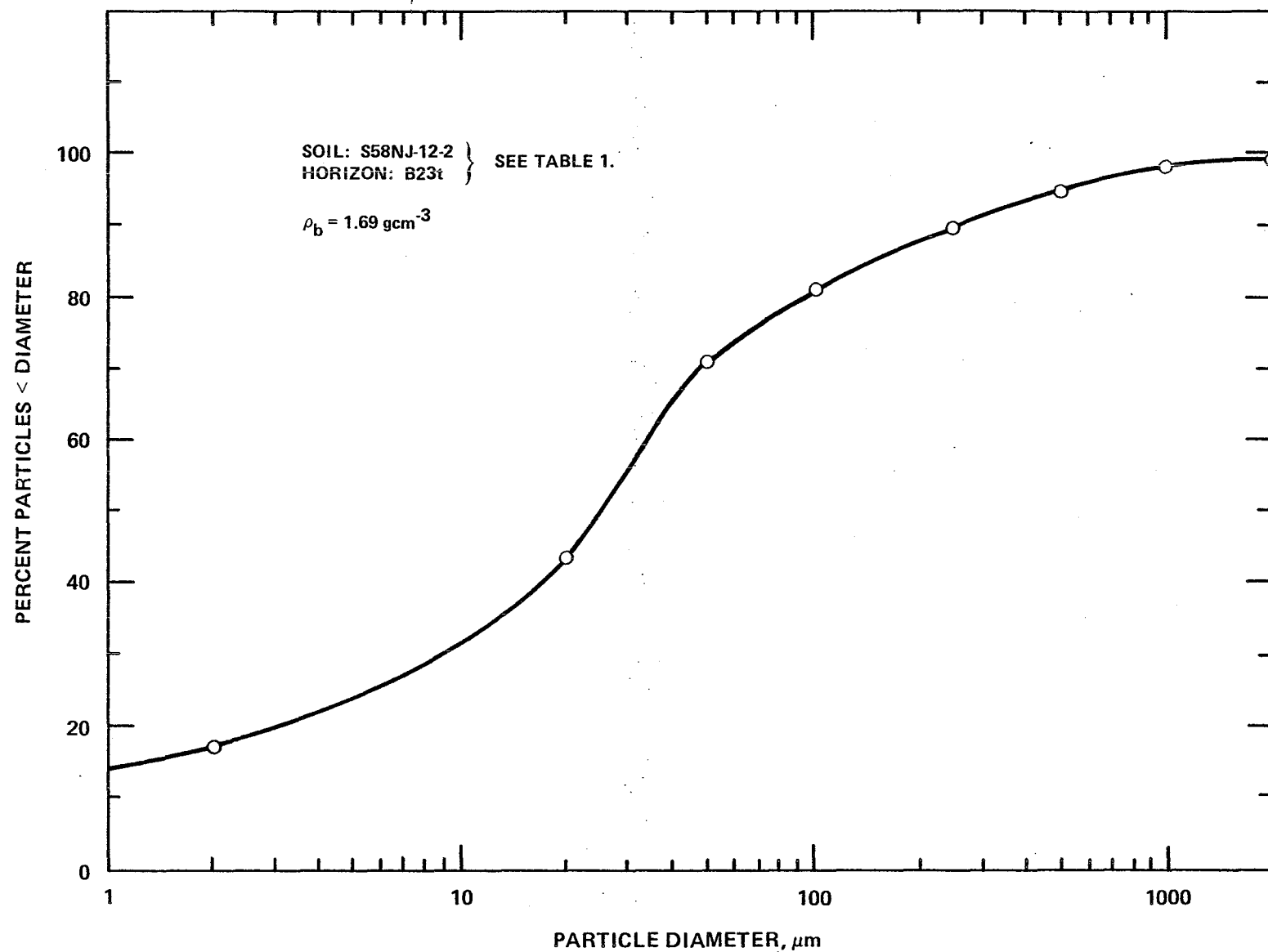


Figure 1.- Particle-size distribution curve and bulk density data for a soil horizon (B23t) of a New Jersey soil described in table 1.

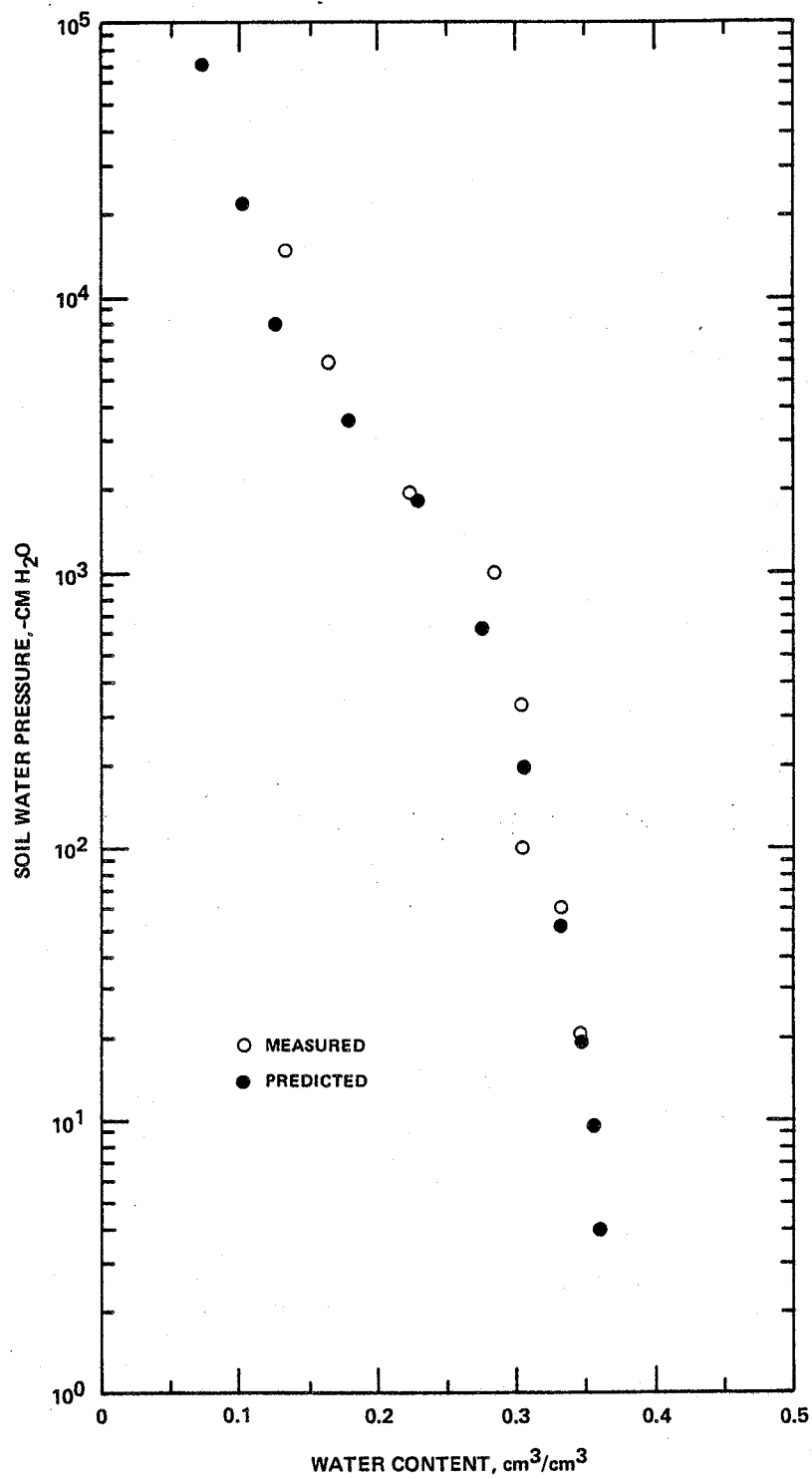


Figure 2.- A comparison between measured and predicted moisture characteristics for a New Jersey soil described in figure 1.

## 5. MOISTURE CHARACTERISTICS OF NEW JERSEY SOILS

Measured and predicted moisture characteristics for 181 New Jersey soil horizons (listed in table 3) are compared in appendix B. For any given horizon, the input and output data are listed on one page and the measured and predicted moisture characteristics are plotted on the facing page. Pressure is plotted on a logarithmic scale. The cycles on the logarithmic scale are separated by the symbol I and are designated by the powers of 10. Within a given cycle, there are two rows of numbers, the upper and the lower. A pair of upper and lower numbers constitute the two significant digits to the right of the decimal point. Thus, a point represented by  $\begin{pmatrix} 2 \\ 5 \end{pmatrix}$  on a cycle of  $10^2$  is to be read as  $0.25 \times 10^2$ . Each plot also shows the sum of absolute differences of the logarithms of the measured and predicted soil water pressures.

A limited resolution is inherent in the printer plots presented in appendix B. This limitation results in the jagged portions of the computed curve in some plots. The plots are adequate, however, for a visual comparison of the measured and the computed data.





## 6. DISCUSSION

The data presented in appendix B show that for a large number of soil horizons the predicted and the measured moisture characteristic curves are in close agreement. For several soil materials, however, the agreement between the two curves appears somewhat marginal. A wide disagreement between the two types of data is also evident in some cases. The disagreements between the measured and the predicted data could be a result of limitations in the model under certain specific conditions. On the other hand, they could be a result of uncertainties in the inputs to the model. Also, they could result from errors in the measured moisture characteristic data. While an uncertainty of  $\pm 5$  percent in the particle-size distribution and  $\pm 0.1$  gram per cubic centimeter in the bulk density data may not be uncommon, additional disparity between the measured and the predicted data may result from variable laboratory procedures. The method of measuring water retention by the New Jersey Agricultural Experiment Station is given in table 2. A tension table in the pressure range from 0.02 to 0.33 bar and a pressure membrane apparatus from 1 to 15 bars were employed. Results from these two methods may not always be compatible. In several instances, the measured curves show a somewhat discontinuous pattern from 0.33 to 2 bar pressure. (See soil horizons 15, 26, 27, 32, 79, 90, and 174 for examples.) In other cases, errors in the measured data are obvious. (See soil horizons 46, 51, 52, 122, 133, and 142 for examples.) Additionally, some variability around each of the measured data points should be expected; however, variability associated with the New Jersey data cannot be ascertained because of the total lack of replication. This is especially the case where bias in determining the equilibrium moisture content is present.

Thus, some disparity between the predicted and the measured data must be expected. From the point of view of testing the predictive ability of the Arya-Paris model, however, the similarity between the shapes of the measured and the predicted curves would seem to be of greater significance. This model is based on the contention that the particle-size distribution is the primary determinant of the pore-size distribution. Therefore, provided the capillarity equation is valid over the range of the moisture content considered, the

similarity between the shapes of the predicted and the measured curves should support the above contention. The data presented in appendix B show that for several soil horizons the predicted and the measured curves are almost coincident; for a large number of other horizons, despite some disparity, their shapes are strikingly similar.

## 7. RECOMMENDATIONS

The results of the evaluations carried out and reported in this document, though encouraging, are not conclusive because of the uncertain nature of the model inputs and measured moisture characteristic data. The authors strongly recommend that detailed particle-size distribution, bulk density, and moisture characteristic data of high quality be obtained to test the Arya-Paris model. It is important that replication be used to obtain a measure of natural variability. Measurement bias resulting from poor laboratory techniques must be checked and eliminated. Also, experiments must be designed to test the effects of variations in specific soil parameters, such as bulk density, particle-size distributions for a given textural class, organic matter, and mineral composition. Additional experiments to examine the nature of the model parameter  $\alpha$  should lead to an improved formulation of the relationship between pore and particle sizes.



## 8. REFERENCES

1. Arya, L. M.; and Paris, J. F.: A Physicoempirical Model to Predict the Soil Moisture Characteristic From Particle-Size Distribution and Bulk Density Data. Soil Sci. Soc. America J., vol. 45, no. 6, November-December 1981, pp. 1023-1030.
2. Soil Survey Laboratory Data and Descriptions for Some Soils of New Jersey. Soil Survey Investigations Report No. 26, U.S. Department of Agriculture (Soil Conservation Service) and New Jersey Agricultural Experiment Station (Rutgers Univ., New Brunswick), 1974.



## APPENDIX A

A LISTING OF THE FORTRAN PROGRAM USED TO GENERATE APPENDIX B





## APPENDIX A

### A LISTING OF THE FORTRAN PROGRAM USED TO GENERATE APPENDIX B

This appendix contains the computer listing of the SMOD3 program, which was used to generate appendix B. Additionally, the file for executing this program on the Earth Observations Division Laboratory (EODL) System is provided.



```

C SPECIFICATION OF INPUT PARAMETERS
C
  944  WRITE(16,944)
      FORMAT(' ENTER ALPHA:')
  383  READ(16,383) ALPHA
      FORMAT(F10.1)
      NP=29
      PD=2.65
      ISKIP=0
      IANS=0
      WRITE(16,141)
  141  FORMAT(' SHOULD ALL SOILS BE USED? 1 FOR YES, 0 FOR NO ')
      READ(15,142) IANS
  142  FORMAT(I1)

C SUBROUTINE HERMIT IS CALLED TO READ IN THE DATA AND TO
C COMPUTE A HERMITE POLYNOMIAL CURVE FIT.
C
      DO 1 NNS=1,280
      CALL HERMIT(DU,CUMPER,THEOB,BD,S,H,IEOF,ISKIP,IANS)
      IF(IEOF.EQ.1) GO TO 999

C THESE STATEMENTS PRINT OUT THE INPUT DATA.
C
      WRITE(11,9001) NNS, (S(I), I=1,8), (H(I), I=1,8)
  9001  FORMAT(13,1X,16A1)
      WRITE(6,810) NNS
  810  FORMAT('1',,/,4X,'SOIL HORIZON NUMBER ',13,5X,
     &' ( SEE TABLE 4 FOR IDENTIFICATION )')
      WRITE(6,720) BD
  720  FORMAT('1',,/,5X,'DENSITY DATA:',,/,5X,'BULK DENSITY =',
     &'S',2,1X,'G/CM**3',,/,5X,'PARTICLE DENSITY = 2.65 G/CM**3',
     &'S', ASSUMED CONSTANT')
      WRITE(6,811)
  811  FORMAT('1',,/,5X,'MEASURED MOISTURE CHARACTERISTIC DATA:')
      WRITE(6,8111)
  8111  FORMAT('0',,4X,'SOIL WATER CONTENT',2X,'SOIL WATER PRESSURE')
      WRITE(6,8112)
  8112  FORMAT('1',,10X,'(CC/CC)',13X,'(-CM H2O)',,/)

C THESE STATEMENTS COMPUTE THE PREDICTED WATER CONTENT VERSUS
C TENSION RELATIONSHIP USING THE ARYA-PARIS MODEL.
C
      DO 812 I=1,8
      IF(THEOB(I).LE.0.0) GO TO 812
      THEOB(I)=THEOB(I)/100.0
  812  WRITE(6,813) THEOB(I), TENOR(I)
  813  FORMAT('1',,11X,F5.3,14X,E9.3)
      PL=0
      DO 20 I=1,NP
      PU=CUMPER(I)
      W(I)=(PU-PL)/100.0
  20  PL=PU
      RL=0.
      DO 21 I=1,NP
      RUCM(I) = DU(I)*0.00005
      RMEAN(I)=0.5*(RUCM(I) + RL)
      RL=RUCM(I)
  21  CONTINUE
      PI=3.1415927
      E=(PD - BD)/BD
      THEL=0.
      DO 22 I = 2,NP
      VSUM(I)=(CUMPER(I)*E)/(100.*PD)
      THEVC(I)=VSUM(I)*BD
      THAVVC(I)=0.5*(THEL + THEVC(I))
      THEL=THEVC(I)
      XN=3.*W(I)/(4.*PI*PD*RMEAN(I)**3)
      EPI=1. - ALPHA
      CAPRAD(I)=SQRT(4.*(XN**EPI)*E*(RMEAN(I)**2)/6.)
      PSI(I) = -0.14694/ CAPRAD(I)
  22  ALGTEN(I)=ALOG10(-PSI(I))

C THESE STATEMENTS PRINT OUT THE ARYA-PARIS MODEL OUTPUT.
C
      WRITE(6,2001)
  2001  FORMAT('1',,/,17X,'PARTICLE SIZE DISTRIBUTION DATA',26X,
     &'S',PREDICTED MOISTURE CHARACTERISTIC DATA')

```

SM000800  
 SM000810  
 SM000820  
 SM000830  
 SM000840  
 SM000850  
 SM000860  
 SM000870  
 SM000880  
 SM000890  
 SM000900  
 SM000910  
 SM000920  
 SM000930  
 SM000940  
 SM000950  
 SM000960  
 SM000970  
 SM000980  
 SM000990  
 SM001000  
 SM001010  
 SM001020  
 SM001030  
 SM001040  
 SM001050  
 SM001060  
 SM001070  
 SM001080  
 SM001090  
 SM001100  
 SM001110  
 SM001120  
 SM001130  
 SM001140  
 SM001150  
 SM001160  
 SM001170  
 SM001180  
 SM001190  
 SM001200  
 SM001210  
 SM001220  
 SM001230  
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 SM001290  
 SM001300  
 SM001310  
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 SM001340  
 SM001350  
 SM001360  
 SM001370  
 SM001380  
 SM001390  
 SM001400  
 SM001410  
 SM001420  
 SM001430  
 SM001440  
 SM001450  
 SM001460  
 SM001470  
 SM001480  
 SM001490  
 SM001500  
 SM001510  
 SM001520  
 SM001530  
 SM001540  
 SM001550  
 SM001560  
 SM001570  
 SM001580

```

      WRITE(6,800)
      800 FORMAT('0',4X,'UPPER PARTICLE DIAM.',3X,'PERCENT PARTICLES',
$3X,'INTERVAL FRACTION',8X,'SOIL WATER CONTENT',3X,
$'SOIL WATER PRESSURE',)
      WRITE(6,801)
      801 FORMAT(' ',6X,'( MICROMETERS )',8X,'LESS THAN DIAM.',
$8X,'( G/G )',17X,'( CC/CC )',12X,'( -CM H2O )',/)
      WRITE(6,203)DU(1),CUMPER(1),W(1)
      DO 24 I = 2,NP
      TENI=-PSI(I)
      24 WRITE(6,203)DU(I),CUMPER(I),W(I),THAVVC(I),TENI
      203 FORMAT(9X,F7.2,16X,F5.1,16X,F5.3,20X,F5.3,14X,E12.5)
      WRITE(6,901)
      901 FORMAT(' ',///,5X,'ALPHA = 1.38')
      SUM=0.
      ALIM=0.0001
      DO 2 MIN=1,6
      ICHK=(-PSI(29)/(ALIM*10.0))
      IF (ICHK.GT.10.0)GO TO 2
      NMIN=MIN-3
      2 CONTINUE

      THIS SUBROUTINE SETS UP THE PLOT AXIS, PLOTS THE DATA AND
      PRINTS IT OUT.

      CALL PIMAGE(THAVVC,PSI,NMIN,NP,THEOB,TENOB)

      THESE STATEMENTS CALCULATE AND PRINTOUT THE SUM OF DIFFERENCES
      BETWEEN THE OBSERVED AND COMPUTED DATA.

      DO 60 I=1,9
      IF (THEOB(I).LE.0.0)GO TO 1
      IF (THEOB(I).LE.THAVVC(1))GO TO 60
      DO 61 J=1,NP
      61 IF (THAVVC(J).GE.THEOB(I))GO TO 600
      GO TO 60
      600 JM1=J - 1
      X0=THAVVC(JM1)
      X1=THAVVC(J)
      Y0=ALGTEN(JM1)
      Y1=ALGTEN(J)

      THIS SUBROUTINE CALCULATES INTERPOLATED VALUES OF WATER CONTENT
      FOR USE IN CALCULATING THE SUM OF DIFFERENCES BETWEEN THE MEASURED
      AND COMPUTED DATA.

      CALL INTERP(X0,X1,Y0,Y1,THEOB(I),Y)
      ALGT0B=ALOG10(TENOB(I))
      SUM=SUM + ABS(ALGT0B - Y)
      60 CONTINUE
      WRITE(6,703)NNS,SUM
      703 FORMAT(' ',///,10X,'SOIL HORIZON NUMBER',I4,15X,'O MEASURED',
$' ',PREDICTED SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = ',E12.5)
      1 CONTINUE
      999 CONTINUE
      STOP
      END
      SUBROUTINE INTERP(X0,X1,Y0,Y1,X,Y)
      B=(Y1-Y0)/(X1-X0)
      A=Y1-B*X1
      Y=A + B*X
      RETURN
      END

      THIS SUBROUTINE CONSTRUCTS THE PLOT AXIS AND PLOTS THE PREDICTED
      AND MEASURED DATA.

      SUBROUTINE PIMAGE(THETAV,PSI,NMIN,NP,THEOB,TENOB)
      DIMENSION THETAV(100),PSI(100),N(6),THEOB(8),TENOB(8)
      INTEGER*2 AIMAGE(58,131)
      INTEGER*2 H/' ',0/'-'/,A1/'I'/,AX/'*'/,AZ/'O'/,A7/'7'/,
      1A1/'1'/,A2/'2'/,A3/'3'/,A4/'4'/,A5/'5'/,A6/'6'/,AP/'.'/,
      INTEGER*2 A0/'0'/,BW/'W'/,BA/'A'/,BT/'T'/,BE/'E'/,
      3BR/'R'/,RC/'C'/,BO/'O'/,BN/'N'/,BSL/'/'/,RLP/'('/,BRP/'')'/
      REAL*8 AW1/'11111122'/,AW2/'22334455'/,
      1AW4/'01346802'/,AW5/'58250506'/
      REAL*4 AW3/'6778'/,AW6/'3199'/

      THESE STATEMENTS SETUP THE PLOT AXIS.

```

SM001590  
 SM001600  
 SM001610  
 SM001620  
 SM001630  
 SM001640  
 SM001650  
 SM001660  
 SM001670  
 SM001680  
 SM001690  
 SM001700  
 SM001710  
 SM001720  
 SM001730  
 SM001740  
 SM001750  
 SM001760  
 SM001770  
 SM001780  
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 SM001810  
 SM001820  
 SM001830  
 SM001840  
 SM001850  
 SM001860  
 SM001870  
 SM001880  
 SM001890  
 SM001900  
 SM001910  
 SM001920  
 SM001930  
 SM001940  
 SM001950  
 SM001960  
 SM001970  
 SM001980  
 SM001990  
 SM002000  
 SM002010  
 SM002020  
 SM002030  
 SM002040  
 SM002050  
 SM002060  
 SM002070  
 SM002080  
 SM002090  
 SM002100  
 SM002110  
 SM002120  
 SM002130  
 SM002140  
 SM002150  
 SM002160  
 SM002170  
 SM002180  
 SM002190  
 SM002200  
 SM002210  
 SM002220  
 SM002230  
 SM002240  
 SM002250  
 SM002260  
 SM002270  
 SM002280  
 SM002290  
 SM002300  
 SM002310  
 SM002320  
 SM002330  
 SM002340  
 SM002350  
 SM002360  
 SM002370

```

C
DO 30 I=1,58
DO 31 J=1,131
  AIMAGE(I,J)=B
31 CONTINUE
30 CONTINUE
DO 32 J=11,131
  AIMAGE(2,J)=0
32 AIMAGE(58,J)=0
DO 33 I=2,58
  AIMAGE(I,11)=0
33 AIMAGE(I,131)=0
DO 34 J=11,131,20
  AIMAGE(2,J)=A1
34 AIMAGE(58,J)=A1
  AIMAGE(2,8)=A0
  AIMAGE(10,8)=A1
  AIMAGE(18,8)=A2
  AIMAGE(26,8)=A3
  AIMAGE(34,8)=A4
  AIMAGE(42,8)=A5
  AIMAGE(50,8)=A6
  AIMAGE(58,8)=A7
  AIMAGE(23,4)=RW
  AIMAGE(24,4)=RA
  AIMAGE(25,4)=RT
  AIMAGE(26,4)=RE
  AIMAGE(27,4)=RR
  AIMAGE(30,4)=RC
  AIMAGE(31,4)=BO
  AIMAGE(32,4)=BN
  AIMAGE(33,4)=BT
  AIMAGE(34,4)=BE
  AIMAGE(35,4)=RN
  AIMAGE(36,4)=BT
DO 386 M=3,7
  AIMAGE(38,M)=RC
386 AIMAGE(38,2)=BLP
  AIMAGE(38,8)=RRP
  AIMAGE(38,5)=RSL
DO 60 K=2,58.8
  AIMAGE(K,7)=AP
60 AIMAGE(K,9)=A0

C
C   THESE STATEMENTS PLOT THE PREDICTED DATA.
C
  LOWER=NMIN
DO 70 I=2,NP
  IX=(ALOG10(-PSI(I)) - FLOAT(LOWER))*20. + 0.5
  IX=IX + 11
  IY=(THETAV(I))*80. + 0.5
  IY=IY + 2
70 AIMAGE(IY,IX)=AP

C
C   THESE STATEMENTS PLOT THE MEASURED DATA.
C
DO 71 I=1,8
  IX=(ALOG10(TENOB(I))-FLOAT(LOWER))*20.0+0.5
  IX=IX+11
  IY=(THEOB(I))*80.0+0.5
  IY=IY+2
  IF (AIMAGE(IY,IX).EQ.8) AIMAGE(IY,IX)=AX
71 IF (AIMAGE(IY,IX).NE.8) AIMAGE(IY,IX)=AZ

C
C   THESE STATEMENTS WRITE OUT THE AXIS, AXIS LABELS AND THE
C   ARRAY CONTAINING THE PLOT
C
  WRITE(6,100)
100 FORMAT(1H1)
  WRITE(6,730)
730 FORMAT(' ',//,35X,'SOIL WATER PRESSURE ( PSI ),',
  & ' ',//,35X,' ( LOG SCALE ),',//)
DO 72 I=1,6
  N(I)=NMIN + I
72 WRITE(6,300) (N(I),I=1,6)
300 FORMAT(3X,6(18X,I2))
  WRITE(6,301)
301 FORMAT(2X,6(17X,'*10'))
  WRITE(6,200) AW1,AW2,AW3,AW1,AW2,AW3,AW1,AW2,AW3,

```

SM002380  
 SM002390  
 SM002400  
 SM002410  
 SM002420  
 SM002430  
 SM002440  
 SM002450  
 SM002460  
 SM002470  
 SM002480  
 SM002490  
 SM002500  
 SM002510  
 SM002520  
 SM002530  
 SM002540  
 SM002550  
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 SM002570  
 SM002580  
 SM002590  
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 SM002930  
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 SM002970  
 SM002980  
 SM002990  
 SM003000  
 SM003010  
 SM003020  
 SM003030  
 SM003040  
 SM003050  
 SM003060  
 SM003070  
 SM003080  
 SM003090  
 SM003100  
 SM003110  
 SM003120  
 SM003130  
 SM003140  
 SM003150  
 SM003160

```

1AW1,AW2,AW3,AW1,AW2,AW3,AW1,AW2,AW3,
2AW4,AW5,AW6,AW4,AW5,AW6,AW4,AW5,AW6,
3AW4,AW5,AW6,AW4,AW5,AW6,AW4,AW5,AW6
200 FORMAT(10X,6(2A8,A4)/10X,6(2A8,A4))
DO 50 I=1,58
50 WRITE(6,101)(AIMAGE(I,J),J=1,131)
101 FORMAT(131A1)
RETURN
END

C THIS SUBROUTINE READS IN THE INPUT DATA, CHECKS FOR MISSING OR
C INVALID DATA AND SETS UP THE ARRAYS FOR INPUT TO AN IMSL
C SUBROUTINE. THE ARRAYS DIMENSIONED AT 10 ARE FOR THE INPUT DATA.
C THE ARRAYS DIMENSIONED AT 29 ARE FOR THE OUTPUT FROM THE CURVE
C FITTING ROUTINES.

SUBROUTINE HERMIT(PS,CD,THEOB,8D,S,H,IEOF,ISKIP,IAN5)
DIMENSION X(10),Y(10),C(10,3),PS(29),CD(29),THEOB(8),XLOG(10)
DIMENSION PSLOG(29)
LOGICAL*1 S(8),H(8),IDUMMY
DATA X/0.0,2.0,20.0,50.0,100.0,250.0,500.0,1000.0,2000.0,3000.0/
NX=8
TOLERC=-99
IEOF=0
N=NX+1
NX=NX+2
IC=NX
IOPT=3
NIN=0
IF(IAN5.EQ.1)GO TO 24
WRITE(15,20)
20 FORMAT('ENTER SOIL NUMBER..I3 FORMAT..ENTER 999 TO STOP')
READ(15,21)NSOIL
21 FORMAT(I3)
IF(NSOIL.EQ.999)GO TO 999
ISKIP=(NSOIL-1)*3-ISKIP
IF(ISKIP.FQ.0)GO TO 24
DO 22 I=1,ISKIP
22 READ(8,23)IDUMMY
23 FORMAT(A1)
24 ISKIP=ISKIP+3
READ(8,10,END=999)(S(I),I=1,8),(H(I),I=1,8),Y(2),8D,
1Y(9),Y(8),Y(7),Y(6),Y(5),Y(4),Y(3)
10 FORMAT(2X,16A1,2X,F5.1,15X,F5.2,7F5.1)
READ(8,11,END=999)(THEOB(I),I=1,8)
11 FORMAT(20X,8F5.1)
READ(8,12,END=999)IDUMMY
12 FORMAT(A1)
DO 801 IL=2,9
801 IF(Y(IL).LE.0.0)GO TO 24
Y(3)=Y(3)+Y(2)
Y(4)=Y(4)+Y(3)
Y(5)=Y(5)+Y(4)
Y(6)=Y(6)+Y(5)
Y(7)=Y(7)+Y(6)
Y(8)=Y(8)+Y(7)
Y(9)=Y(9)+Y(8)
Y(1)=0.
DO 100 K=1,9
100 IF(Y(K).GT.100.00)Y(K)=100.0
DO 101 MN=1,8
IF(THEOB(MN).LE.0.0)GO TO 24
101 THEOB(MN)=THEOB(MN)*8D
Y(NX)=100.
NOUT=10
CALL INTRP(X,XLOG,Y,C,PS,PSLOG,CD,NX,IC,
S IOPT,NIN,NOUT,TOLERC)
DO 404 M=2,29
CDIFF=CD(M)-CD(M-1)
404 IF(CDIFF.LT.0.0)GO TO 24
RETURN
999 IEOF=1
RETURN
END

C THIS SUBROUTINE IS CALLED FROM SUBROUTINE HERMIT. THE
C IMSL SUBROUTINE CALLS ARE CONTAINED IN THIS SUBROUTINE.
C
SUBROUTINE INTRP(X,XLOG,Y,C,PS,PSLOG,CD,NX,IC,

```

SM003170  
SM003180  
SM003190  
SM003200  
SM003210  
SM003220  
SM003230  
SM003240  
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SM003880  
SM003890  
SM003900  
SM003910  
SM003920  
SM003930  
SM003940  
SM003950

FILE: SMO03      FORTRAN J      EODL / JOHNSON SPACE CENTER

	\$	DIMENSION IOPT,NIN,NOUT,TOLERC)	SM003960
		\$XLOG(NX),PSLOG(29)	SM003970
		CALL UGETIO(IOPT,NIN,NOUT)	SM003980
	DO 10 L=2,NX		SM003990
		XLOG(1)=TOLERC	SM004000
		XLOG(L)=ALOG10(X(L))	SM004010
10	CONTINUE		SM004020
		CALL IQHSCU(XLOG,Y,NX,C,IC,IER)	SM004030
		CALL KNOT(PS,PSLOG)	SM004040
		CALL ICSEVU(XLOG,Y,NX,C,IC,PSLOG,CD,29,IER)	SM004050
		RETURN	SM004060
		END	SM004070
C			SM004080
C		THIS SUBROUTINE IS CALLED FROM SUBROUTINE INTRP. ITS PURPOSE	SM004090
C		IS TO CALCULATE THE POINTS AT WHICH TO EVALUATE THE HERMITE	SM004100
C		POLYNOMIAL.	SM004110
		SUBROUTINE KNOT(PS,PSLOG)	SM004120
		DIMENSION M(27),PS(29),PSLOG(29)	SM004130
	DO 10 I=1,9		SM004140
		M(I)=1	SM004150
		PS(I)=M(I)	SM004160
		M(I+9)=10*M(I)	SM004170
		PS(I+9)=M(I+9)	SM004180
		M(I+18)=100*M(I)	SM004190
10		PS(I+18)=M(I+18)	SM004200
		PS(28)=1000.	SM004210
		PS(29)=2000.	SM004220
	DO 20 K=1,29		SM004230
		PSLOG(K)=ALOG10(PS(K))	SM004240
20	CONTINUE		SM004250
	RETURN		SM004260
	END		SM004270
			SM004280
			SM004290

FILE: SMOD3 EXEC J EODL / JOHNSON SPACE CENTER

```
&CONTROL OFF
FILEDEF 15 TERM (PERM
FILEDEF 16 TERM (PERM
FILEDEF 6 DISK NJSOIL LISTING D (PERM
FILEDEF 8 DISK SOIL DATA L (PERM
FILEDEF 10 DISK SMOD3 MSGS D (PERM
FILEDEF 11 DISK SOIL TYPE D (PERM RECFM F LRECL 20 BLKSIZE 20
GETDISK IMSL
GLORAL TXTLIB CMSLIB FORTMOD2 SIMSLIB DIMSLIB
LOAD SMOD3 (CLEAR START
&EXIT
```



## APPENDIX B

A COMPARISON OF LABORATORY-MEASURED AND MODEL-PREDICTED MOISTURE  
CHARACTERISTICS FOR 181 NEW JERSEY SOIL HORIZONS



## APPENDIX B

### A COMPARISON OF LABORATORY-MEASURED AND MODEL-PREDICTED MOISTURE CHARACTERISTICS FOR 181 NEW JERSEY SOIL HORIZONS

In this appendix, the measured and predicted moisture characteristics for 181 New Jersey soil horizons are compared. The material for each soil horizon is arranged so that the listing of input and output data and the plot of the measured and predicted moisture characteristics appear on facing pages.

SOIL HORIZON NUMBER 1 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.63 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.073	0.150E+05
0.081	0.600E+04
0.109	0.200E+04
0.205	0.100E+04
0.228	0.330E+03
0.256	0.100E+03
0.279	0.600E+02
0.311	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	6.75	0.065
3.00	27.45	0.012
4.00	29.66	0.009
5.00	32.22	0.008
6.00	34.44	0.008
7.00	36.66	0.008
8.00	38.88	0.007
9.00	41.11	0.007
10.00	43.33	0.007
20.00	55.55	0.061
30.00	66.66	0.062
40.00	77.77	0.053
50.00	88.88	0.036
60.00	90.00	0.021
70.00	91.11	0.015
80.00	92.22	0.013
90.00	93.33	0.013
100.00	94.44	0.014
200.00	97.77	0.156
300.00	98.88	0.120
400.00	99.11	0.125
500.00	99.44	0.076
600.00	99.66	0.038
700.00	99.77	0.023
800.00	99.88	0.014
900.00	99.99	0.007
1000.00	99.99	0.003
2000.00	100.0	0.003

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.015	0.18654E+06
0.035	0.78345E+05
0.035	0.45967E+05
0.038	0.30823E+05
0.041	0.22364E+05
0.044	0.17101E+05
0.047	0.13577E+05
0.050	0.11088E+05
0.053	0.92570E+04
0.055	0.64087E+04
0.089	0.30655E+04
0.111	0.17529E+04
0.128	0.10971E+04
0.139	0.72696E+03
0.146	0.51993E+03
0.151	0.40354E+03
0.156	0.33210E+03
0.161	0.28331E+03
0.194	0.21947E+03
0.249	0.94958E+02
0.298	0.55651E+02
0.336	0.34088E+02
0.358	0.21832E+02
0.370	0.15306E+02
0.377	0.11055E+02
0.381	0.80248E+01
0.383	0.55157E+01
0.384	0.27872E+01

ALPHA = 1.28



SOIL HORIZON NUMBER 2 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.70 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.121	0.150E+05
0.141	0.600E+04
0.177	0.200E+04
0.262	0.100E+04
0.277	0.330E+03
0.292	0.100E+03
0.306	0.600E+02
0.330	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	13.8	0.138
2.00	16.2	0.024
3.00	17.8	0.016
4.00	19.3	0.014
5.00	20.6	0.013
6.00	21.7	0.012
7.00	22.8	0.011
8.00	23.8	0.010
9.00	24.8	0.010
10.00	25.7	0.009
20.00	32.8	0.071
30.00	38.7	0.059
40.00	43.3	0.046
50.00	46.5	0.032
60.00	48.5	0.020
70.00	49.8	0.013
80.00	51.0	0.012
90.00	52.3	0.012
100.00	53.5	0.013
200.00	67.3	0.138
300.00	77.9	0.106
400.00	87.4	0.095
500.00	93.3	0.059
600.00	96.4	0.031
700.00	98.1	0.018
800.00	99.1	0.010
900.00	99.6	0.005
1000.00	99.8	0.002
2000.00	100.0	0.002

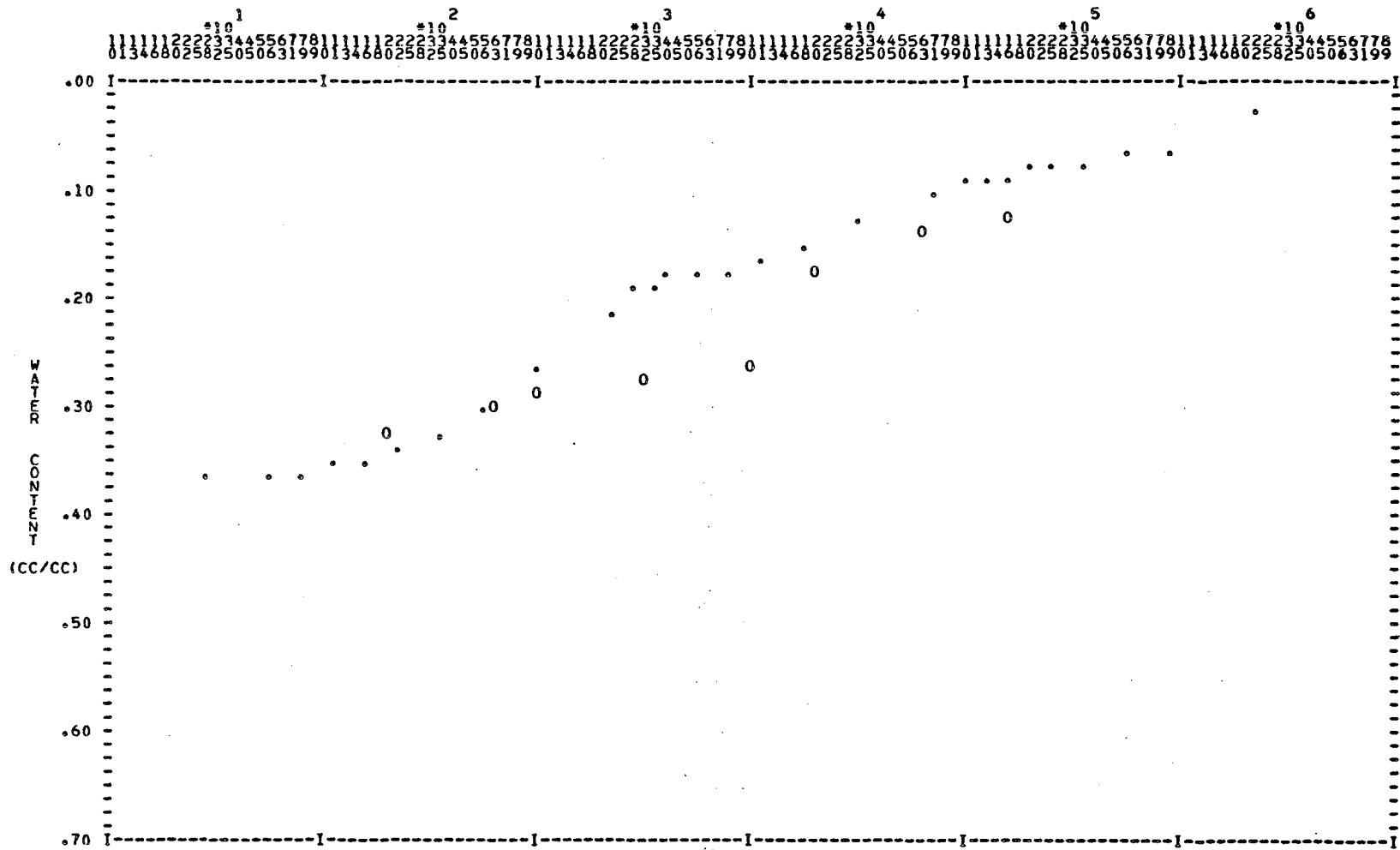
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.029	0.22487E+06
0.061	0.93560E+05
0.066	0.53865E+05
0.071	0.35558E+05
0.076	0.25532E+05
0.080	0.19339E+05
0.084	0.15241E+05
0.087	0.12371E+05
0.091	0.10235E+05
0.105	0.74232E+04
0.128	0.32123E+04
0.147	0.18101E+04
0.161	0.11381E+04
0.170	0.75815E+03
0.176	0.54131E+03
0.181	0.42084E+03
0.185	0.34752E+03
0.189	0.29741E+03
0.217	0.22696E+03
0.260	0.96664E+02
0.296	0.55874E+02
0.324	0.34377E+02
0.340	0.22144E+02
0.349	0.15375E+02
0.354	0.11009E+02
0.356	0.79289E+01
0.357	0.54141E+01
0.358	0.27308E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 2

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.37437E+01

SOIL HORIZON NUMBER 3 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.62 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.136	0.150E+05
0.154	0.600E+04
0.186	0.200E+04
0.258	0.100E+04
0.277	0.330E+03
0.296	0.100E+03
0.308	0.600E+02
0.342	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	18.8	0.188
2.00	20.4	0.016
3.00	21.4	0.010
4.00	22.3	0.008
5.00	23.0	0.008
6.00	23.8	0.007
7.00	24.4	0.007
8.00	25.1	0.007
9.00	25.7	0.006
10.00	26.4	0.006
20.00	31.7	0.053
30.00	35.8	0.041
40.00	38.8	0.030
50.00	41.2	0.024
60.00	43.1	0.019
70.00	44.8	0.017
80.00	46.3	0.015
90.00	47.7	0.014
100.00	49.0	0.013
200.00	65.2	0.162
300.00	77.2	0.120
400.00	87.1	0.100
500.00	93.4	0.063
600.00	96.6	0.032
700.00	98.4	0.017
800.00	99.3	0.009
900.00	99.7	0.004
1000.00	99.8	0.001
2000.00	100.0	0.002

PREDICTED MOISTURE CHARACTERISTIC DATA

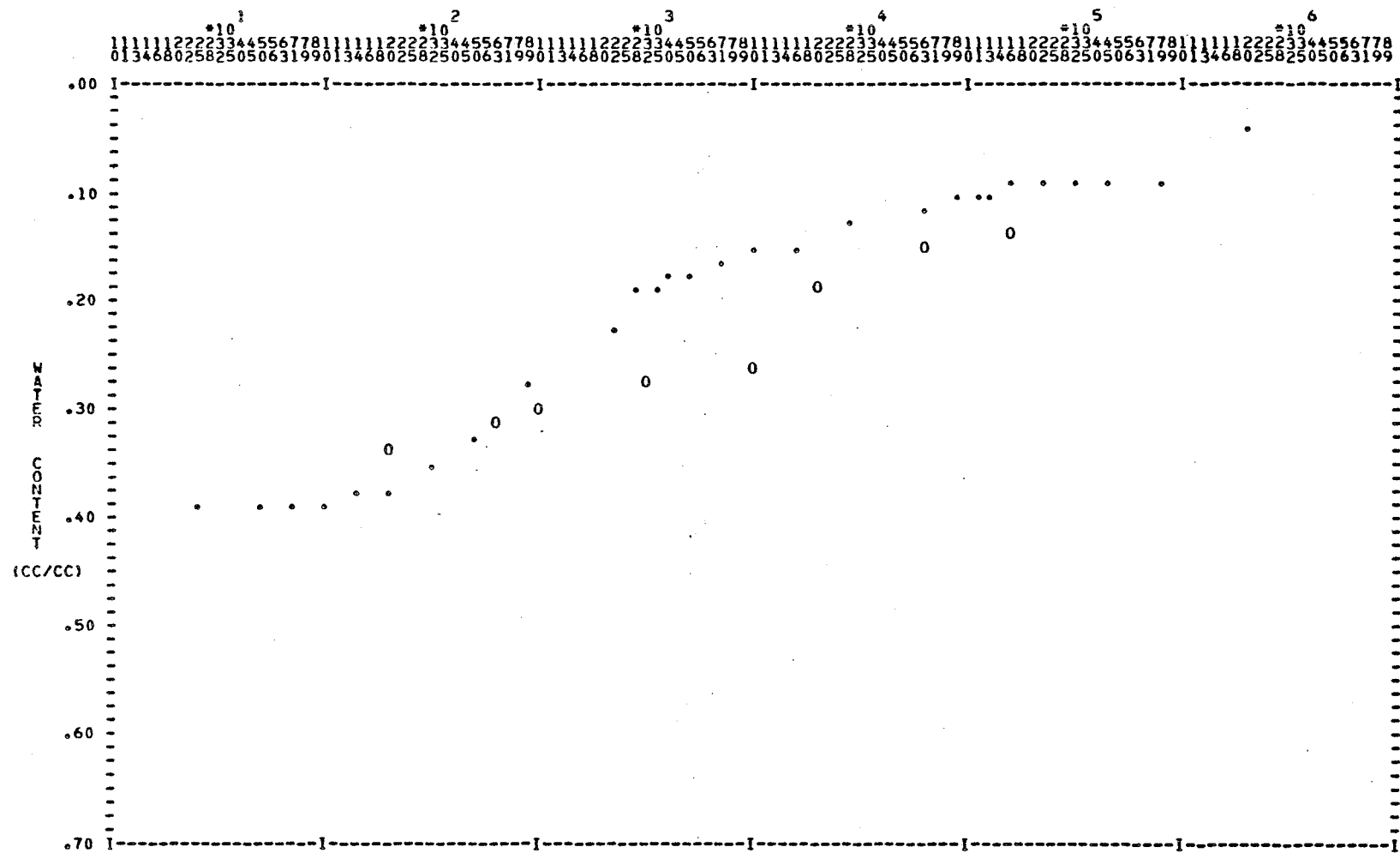
SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.040	0.19545E+06
0.081	0.80150E+05
0.085	0.45682E+05
0.088	0.30242E+05
0.091	0.21805E+05
0.094	0.16618E+05
0.096	0.13169E+05
0.099	0.10744E+05
0.101	0.89652E+04
0.113	0.65956E+04
0.131	0.28094E+04
0.145	0.15678E+04
0.156	0.10083E+04
0.164	0.70748E+03
0.171	0.52905E+03
0.177	0.41415E+03
0.183	0.33524E+03
0.188	0.27834E+03
0.222	0.21922E+03
0.277	0.92814E+02
0.319	0.52860E+02
0.351	0.32604E+02
0.369	0.20991E+02
0.379	0.14336E+02
0.384	0.10097E+02
0.387	0.71608E+01
0.388	0.48589E+01
0.388	0.25601E+01

ALPHA = 1.38



SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 4 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.64 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.133	0.150E+05
0.148	0.600E+04
0.180	0.200E+04
0.253	0.100E+04
0.264	0.330E+03
0.284	0.100E+03
0.297	0.600E+02
0.321	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	18.8	0.188
2.00	19.9	0.011
3.00	10.5	0.006
4.00	0.0	0.004
5.00	11.7	0.094
6.00	11.1	0.005
7.00	22.2	0.005
8.00	22.2	0.005
9.00	22.2	0.006
10.00	33.3	0.006
20.00	30.0	0.061
30.00	35.0	0.050
40.00	38.0	0.036
50.00	41.0	0.028
60.00	43.0	0.023
70.00	45.0	0.019
80.00	47.0	0.017
90.00	48.0	0.015
100.00	49.0	0.013
200.00	66.0	0.166
300.00	73.0	0.120
400.00	83.0	0.097
500.00	89.0	0.061
600.00	94.0	0.030
700.00	98.0	0.015
800.00	99.0	0.007
900.00	99.7	0.003
1000.00	99.8	0.001
2000.00	100.0	0.002

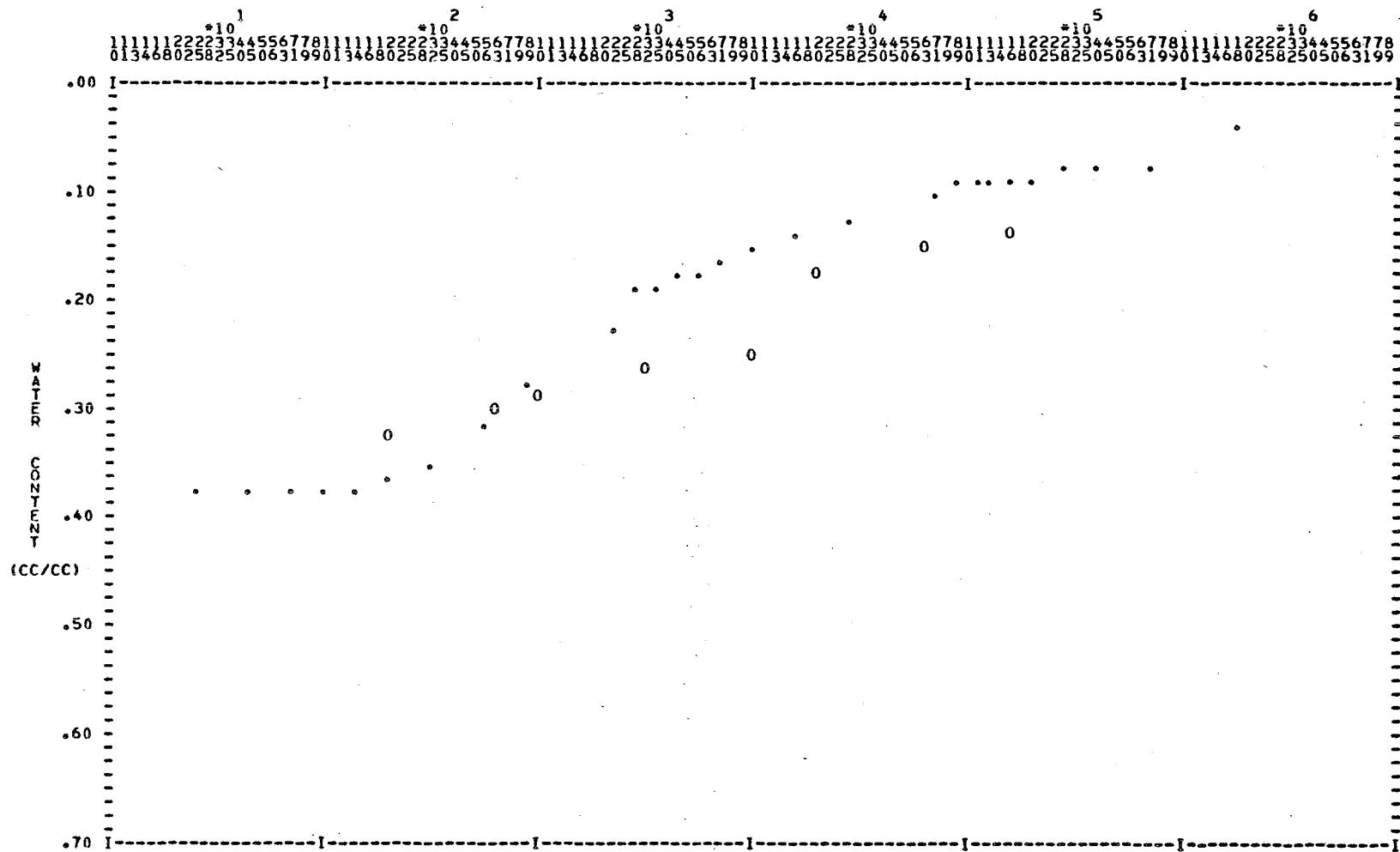
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE (-CM H2O )

0.038	0.18460E+06
0.077	0.76333E+05
0.079	0.40342E+05
0.080	0.27392E+05
0.082	0.20343E+05
0.084	0.15892E+05
0.086	0.12843E+05
0.088	0.10643E+05
0.090	0.88721E+04
0.103	0.68721E+04
0.124	0.26659E+04
0.145	0.16406E+04
0.150	0.10537E+04
0.160	0.73970E+03
0.170	0.55126E+03
0.175	0.43827E+03
0.180	0.38433E+03
0.200	0.22334E+03
0.270	0.94231E+02
0.310	0.53385E+02
0.347	0.32927E+02
0.365	0.21087E+02
0.373	0.14160E+02
0.378	0.97733E+01
0.379	0.67789E+01
0.380	0.45768E+01
0.381	0.26013E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 4

0 MEASURED ;      • PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.41251E+01

SOIL HORIZON NUMBER 5 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.60 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.082	0.150E+05
0.106	0.600E+04
0.114	0.200E+04
0.194	0.100E+04
0.206	0.330E+03
0.227	0.100E+03
0.242	0.600E+02
0.318	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	14.0	0.140
2.00	14.2	0.002
3.00	14.4	0.002
4.00	14.6	0.002
5.00	14.7	0.002
6.00	14.9	0.002
7.00	15.1	0.002
8.00	15.3	0.002
9.00	15.5	0.002
10.00	15.7	0.002
20.00	17.2	0.015
30.00	19.1	0.019
40.00	21.0	0.019
50.00	22.4	0.014
60.00	23.6	0.012
70.00	24.7	0.011
80.00	25.8	0.011
90.00	26.9	0.011
100.00	28.0	0.011
200.00	48.0	0.200
300.00	65.2	0.172
400.00	81.1	0.158
500.00	90.4	0.093
600.00	94.8	0.044
700.00	97.4	0.026
800.00	98.9	0.014
900.00	99.6	0.007
1000.00	99.8	0.002
2000.00	100.0	0.002

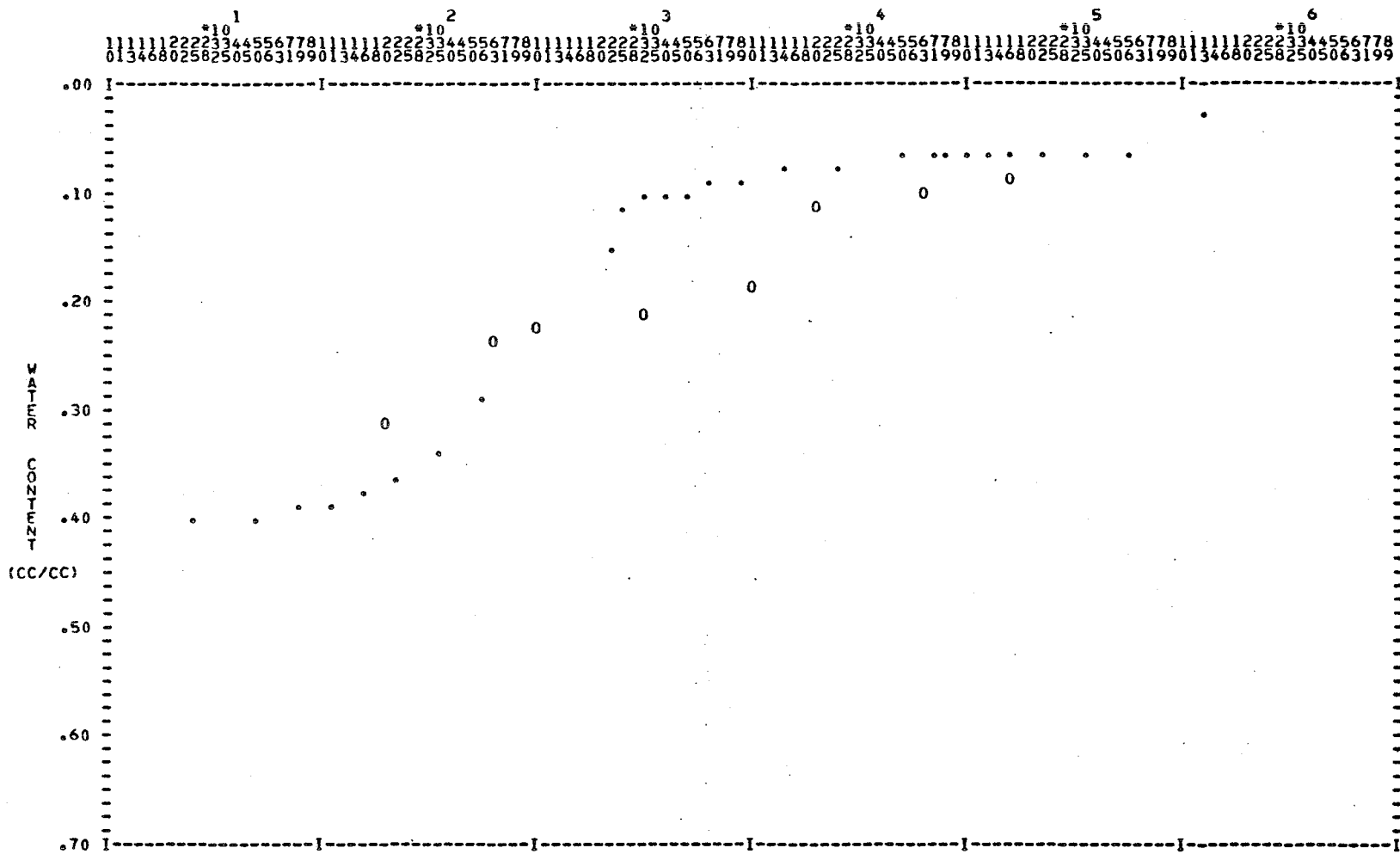
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.028	0.13309E+06
0.057	0.56484E+05
0.057	0.33635E+05
0.058	0.22747E+05
0.059	0.16594E+05
0.060	0.12737E+05
0.060	0.10141E+05
0.061	0.82998E+04
0.062	0.69412E+04
0.065	0.51316E+04
0.072	0.23924E+04
0.079	0.14060E+04
0.086	0.90121E+03
0.091	0.63301E+03
0.096	0.48336E+03
0.100	0.38483E+03
0.104	0.31567E+03
0.109	0.26486E+03
0.151	0.22457E+03
0.224	0.97915E+02
0.290	0.56812E+02
0.340	0.34618E+02
0.367	0.21947E+02
0.381	0.15227E+02
0.389	0.10887E+02
0.393	0.78186E+01
0.395	0.52776E+01
0.396	0.25199E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 5

0 MEASURED :	• PREDICTED
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
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21	21
22	22
23	23
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79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.50788E+01

SOIL HORIZON NUMBER 6 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.57 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.078	0.150E+05
0.083	0.600E+02
0.093	0.200E+04
0.190	0.100E+04
0.207	0.100E+03
0.279	0.100E+03
0.322	0.600E+02
0.326	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

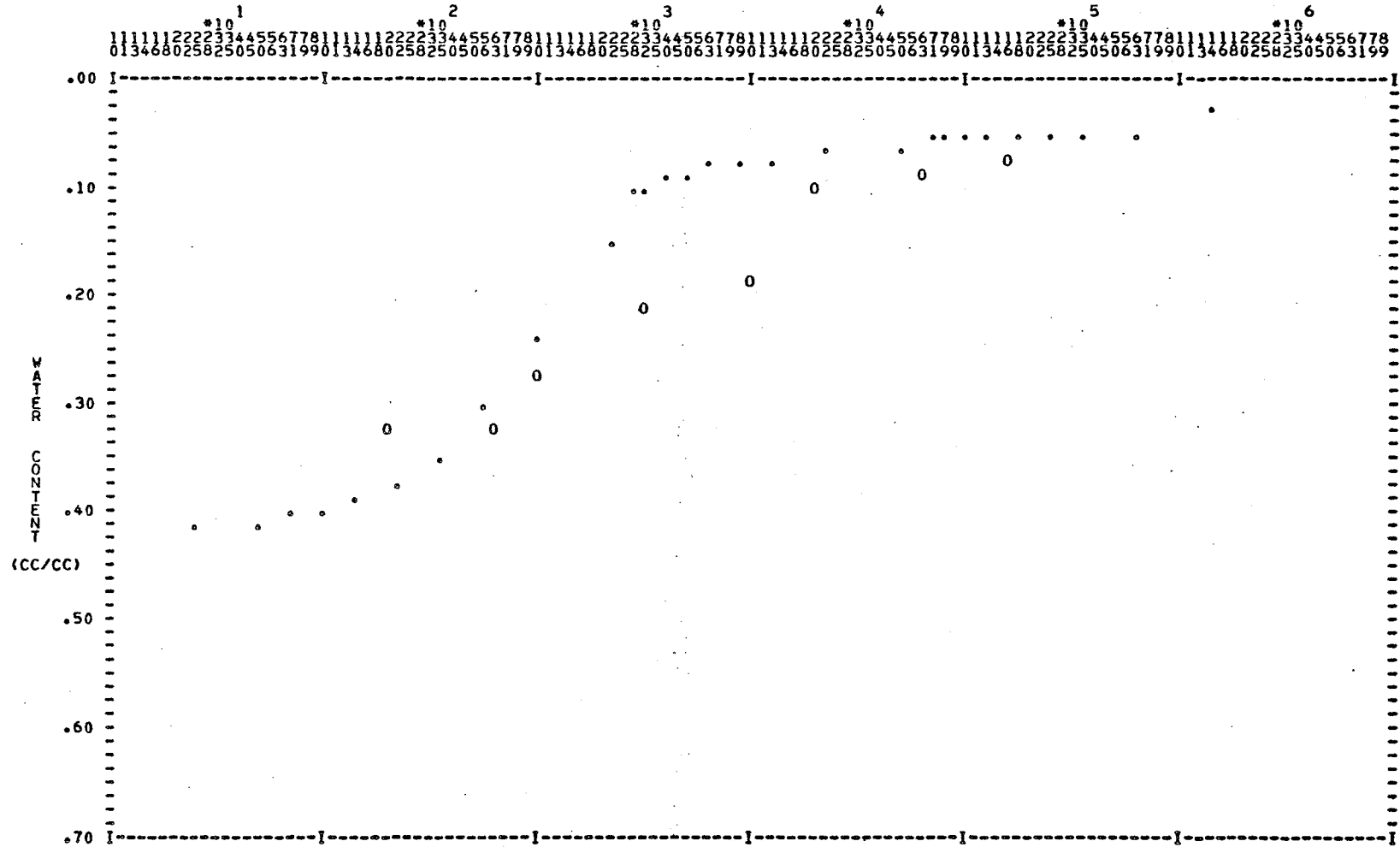
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	11.4	0.114
2.00	11.7	0.003
4.00	12.0	0.003
6.00	12.3	0.003
8.00	12.6	0.003
10.00	12.8	0.003
15.00	13.0	0.002
20.00	13.3	0.003
30.00	13.5	0.002
40.00	13.7	0.002
50.00	14.0	0.013
60.00	14.5	0.015
70.00	14.9	0.015
80.00	15.1	0.012
90.00	15.2	0.012
100.00	15.3	0.014
200.00	15.4	0.015
300.00	15.5	0.016
400.00	15.6	0.022
500.00	15.7	0.177
600.00	15.8	0.156
700.00	15.9	0.093
800.00	16.0	0.046
900.00	16.1	0.025
1000.00	16.2	0.014
2000.00	16.3	0.006
	16.4	0.002
	16.5	0.002

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.024	0.13919E+06
0.048	0.60422E+05
0.049	0.35967E+05
0.051	0.23961E+05
0.052	0.17212E+05
0.053	0.13026E+05
0.054	0.10241E+05
0.054	0.82881E+04
0.055	0.68618E+04
0.058	0.48824E+04
0.064	0.22210E+04
0.070	0.13132E+04
0.075	0.84701E+03
0.080	0.60822E+03
0.085	0.47919E+03
0.090	0.39061E+03
0.096	0.32607E+03
0.102	0.27722E+03
0.150	0.22359E+03
0.231	0.96117E+02
0.299	0.55293E+02
0.350	0.33818E+02
0.378	0.21543E+02
0.393	0.14824E+02
0.401	0.10515E+02
0.405	0.74964E+01
0.406	0.50419E+01
0.407	0.24613E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 7 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.53 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.046	0.150E+05
0.052	0.600E+04
0.067	0.200E+04
0.142	0.100E+04
0.153	0.330E+03
0.176	0.100E+03
0.190	0.600E+02
0.334	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	7.8	0.078
2.00	8.4	0.006
3.00	8.8	0.004
4.00	9.2	0.004
5.00	9.6	0.004
6.00	9.9	0.003
7.00	10.2	0.003
8.00	10.5	0.003
9.00	10.8	0.003
10.00	11.0	0.003
20.00	13.9	0.020
30.00	14.7	0.017
40.00	16.2	0.015
50.00	17.3	0.011
60.00	18.3	0.010
70.00	19.3	0.010
80.00	20.9	0.010
90.00	21.2	0.009
100.00	22.1	0.009
200.00	40.0	0.179
300.00	57.4	0.174
400.00	74.8	0.173
500.00	85.9	0.107
600.00	91.3	0.058
700.00	95.2	0.039
800.00	97.7	0.025
900.00	99.0	0.014
1000.00	99.5	0.005
2000.00	100.0	0.005

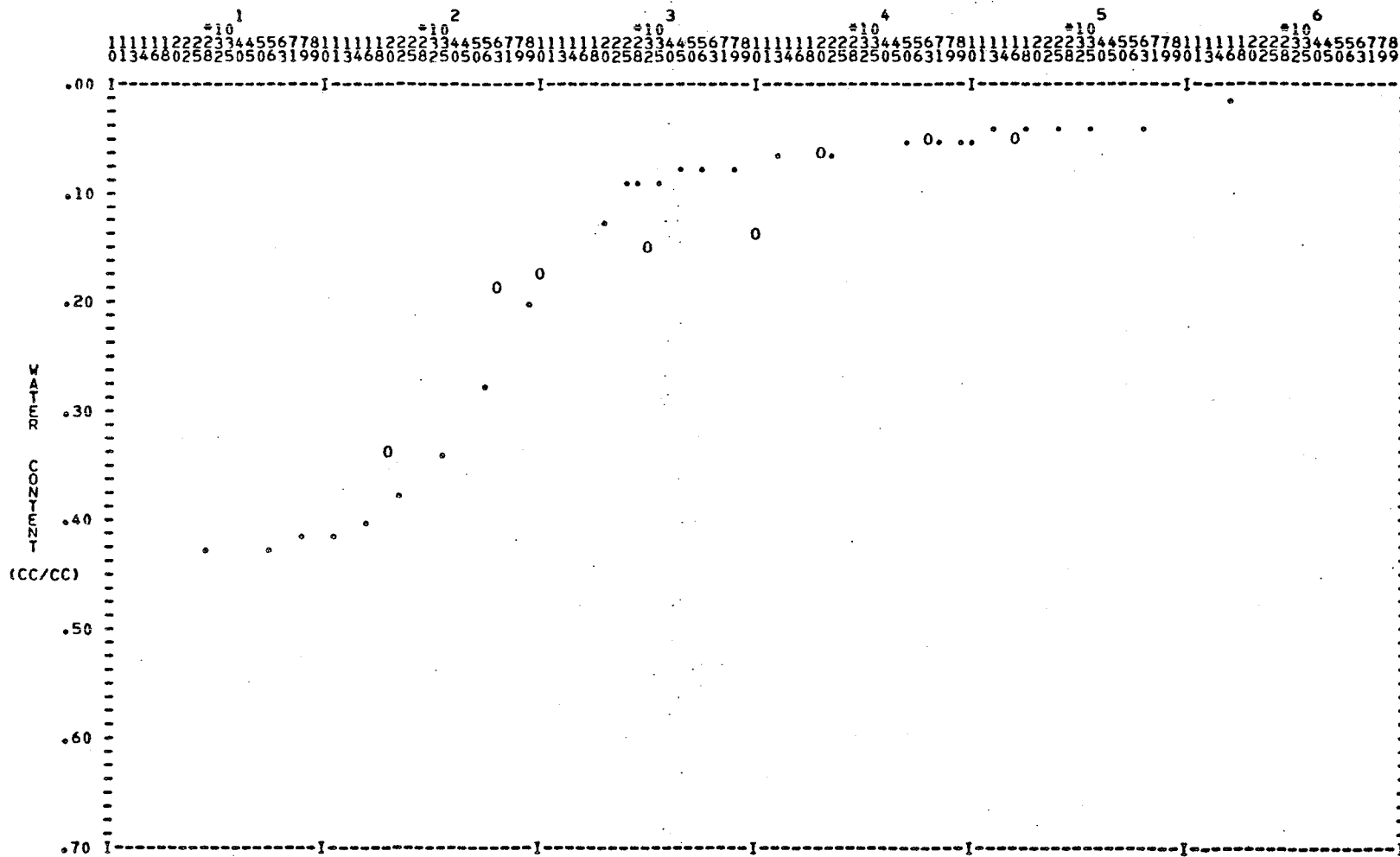
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.018	0.15061E+06
0.036	0.63278E+05
0.038	0.36786E+05
0.040	0.24387E+05
0.041	0.17517E+05
0.043	0.13281E+05
0.044	0.10468E+05
0.045	0.84956E+04
0.046	0.70542E+04
0.051	0.50899E+04
0.059	0.22173E+04
0.065	0.12713E+04
0.071	0.81659E+03
0.075	0.58166E+03
0.079	0.44472E+03
0.084	0.35536E+03
0.088	0.28983E+03
0.092	0.24149E+03
0.131	0.20821E+03
0.206	0.92889E+02
0.279	0.54725E+02
0.339	0.33668E+02
0.374	0.21864E+02
0.394	0.15591E+02
0.408	0.11410E+02
0.416	0.83681E+01
0.420	0.57825E+01
0.422	0.28397E+01

ALPHA = 1.38



SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 7

0 MEASURED : . . . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.23709E+01

SOIL HORIZON NUMBER 8 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.57 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.028	0.150E+05
0.039	0.600E+04
0.058	0.200E+04
0.121	0.100E+04
0.138	0.330E+03
0.154	0.100E+03
0.226	0.600E+02
0.349	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

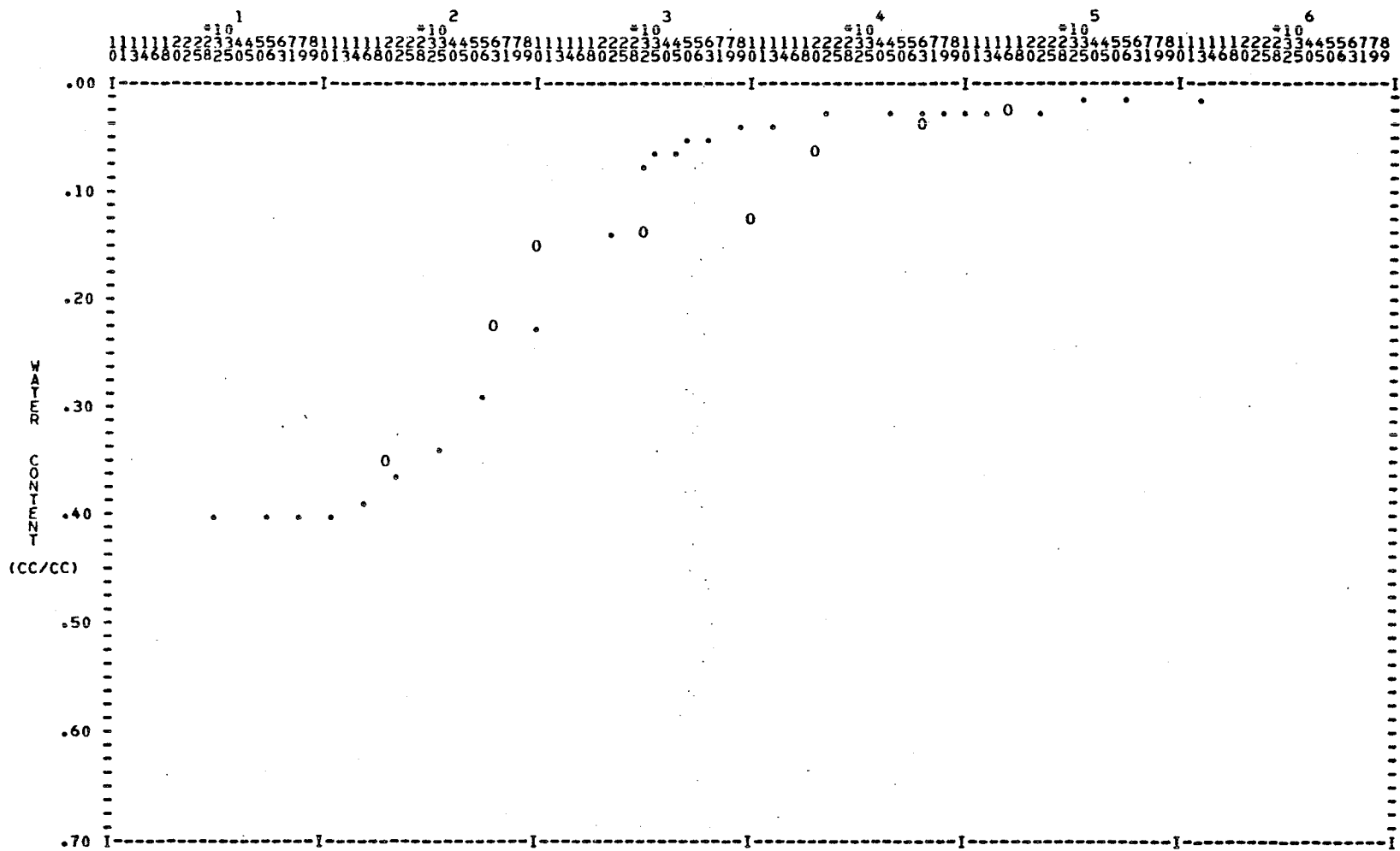
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	4.1	0.041
2.00	4.3	0.002
3.00	4.5	0.002
4.00	4.7	0.002
5.00	4.9	0.002
6.00	5.1	0.002
7.00	5.3	0.002
8.00	5.4	0.002
9.00	5.6	0.001
10.00	5.7	0.001
20.00	6.6	0.009
30.00	6.8	0.012
40.00	7.1	0.014
50.00	7.6	0.012
60.00	8.0	0.014
70.00	8.2	0.012
80.00	8.4	0.012
90.00	8.7	0.003
100.00	8.7	0.000
200.00	11.1	0.026
300.00	15.3	0.042
400.00	17.3	0.020
500.00	18.6	0.013
600.00	19.3	0.007
700.00	19.6	0.003
800.00	19.8	0.002
900.00	19.9	0.001
1000.00	19.9	0.000
2000.00	100.0	0.007

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.009	0.12356E+06
0.018	0.55898E+05
0.019	0.33983E+05
0.020	0.22712E+05
0.020	0.16302E+05
0.021	0.12311E+05
0.022	0.96331E+04
0.022	0.77891E+04
0.022	0.64286E+04
0.022	0.45022E+04
0.024	0.21247E+04
0.034	0.12936E+04
0.040	0.84903E+03
0.044	0.62269E+03
0.050	0.50556E+03
0.058	0.42678E+03
0.068	0.35650E+03
0.080	0.30320E+03
0.141	0.22005E+03
0.203	0.15662E+03
0.338	0.93377E+02
0.609	0.52490E+02
0.897	0.34333E+02
0.397	0.18949E+02
0.402	0.78170E+01
0.404	0.55494E+01
0.406	0.31227E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 8

0 MEASURED :	. PREDICTED
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
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69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.37170E+01

SOIL HORIZON NUMBER 9 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.63 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.024	0.150E+05
0.034	0.600E+04
0.047	0.200E+04
0.081	0.100E+04
0.091	0.330E+03
0.109	0.100E+03
0.184	0.600E+02
0.342	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

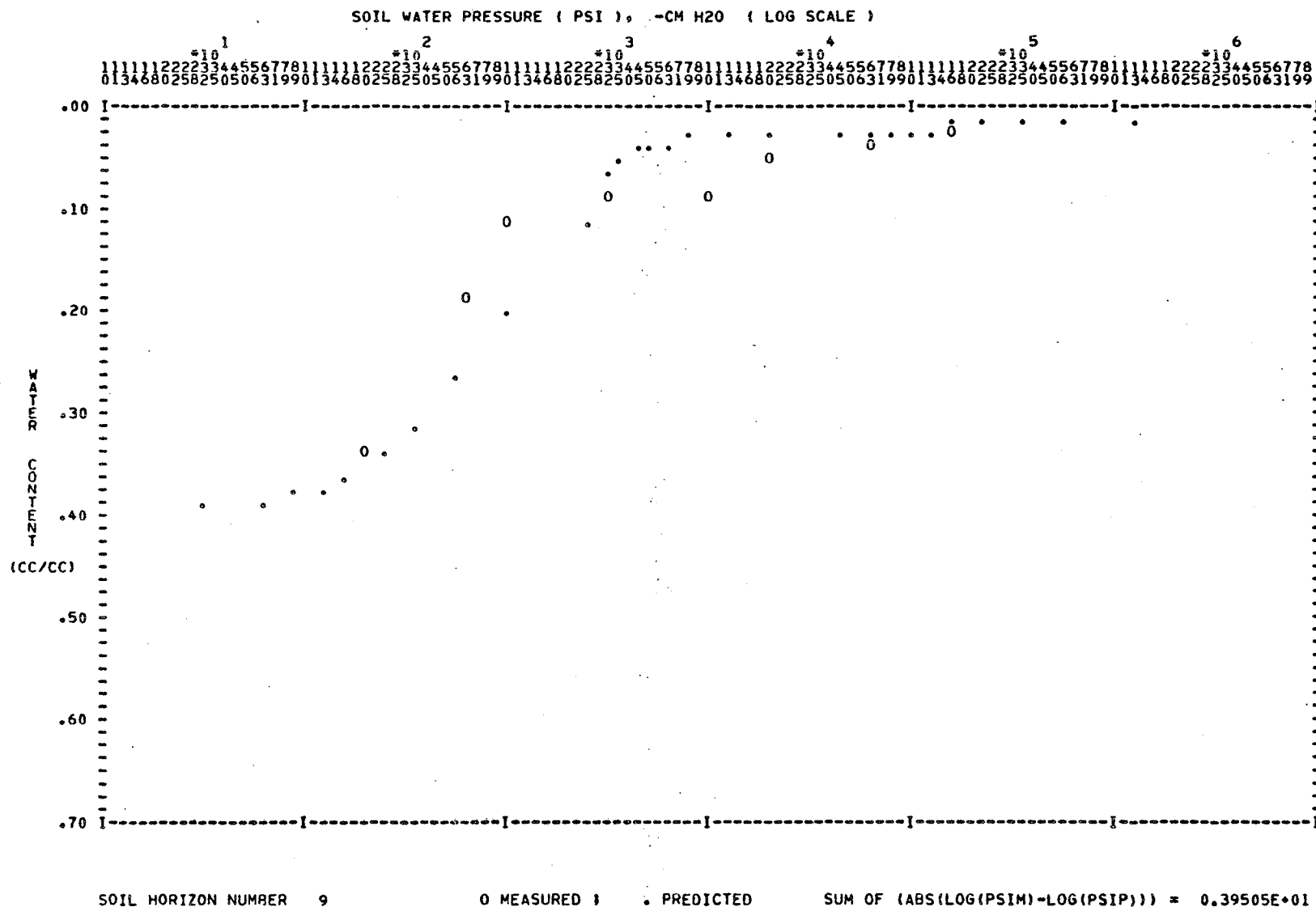
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	3.9	0.039
2.00	4.1	0.002
3.00	4.3	0.002
4.00	4.5	0.002
5.00	4.6	0.002
6.00	4.8	0.002
7.00	4.9	0.001
8.00	5.1	0.001
9.00	5.2	0.001
10.00	5.3	0.001
20.00	6.0	0.007
30.00	6.8	0.008
40.00	7.6	0.008
50.00	8.3	0.007
60.00	9.1	0.008
70.00	10.4	0.013
80.00	12.0	0.017
90.00	14.0	0.020
100.00	16.3	0.023
200.00	41.7	0.254
300.00	60.2	0.186
400.00	75.3	0.150
500.00	85.4	0.101
600.00	91.5	0.061
700.00	95.4	0.038
800.00	97.6	0.023
900.00	98.8	0.012
1000.00	99.3	0.005
2000.00	100.0	0.007

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.008	0.13152E+06
0.016	0.57939E+05
0.017	0.34680E+05
0.018	0.23056E+05
0.018	0.16501E+05
0.019	0.12438E+05
0.019	0.97386E+04
0.020	0.78491E+04
0.020	0.64719E+04
0.022	0.45175E+04
0.025	0.20635E+04
0.028	0.12367E+04
0.031	0.80358E+03
0.034	0.60614E+03
0.038	0.50542E+03
0.043	0.42525E+03
0.050	0.36194E+03
0.058	0.31169E+03
0.112	0.24066E+03
0.196	0.10168E+03
0.261	0.57601E+02
0.309	0.36014E+02
0.341	0.23905E+02
0.360	0.16785E+02
0.371	0.12154E+02
0.378	0.88684E+01
0.381	0.62083E+01
0.384	0.32741E+01

ALPHA = 1.38

B-19



SOIL HORIZON NUMBER 10 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.53 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.047	0.150E+05
0.050	0.600E+04
0.073	0.200E+04
0.093	0.100E+04
0.103	0.330E+03
0.115	0.100E+03
0.197	0.600E+02
0.355	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

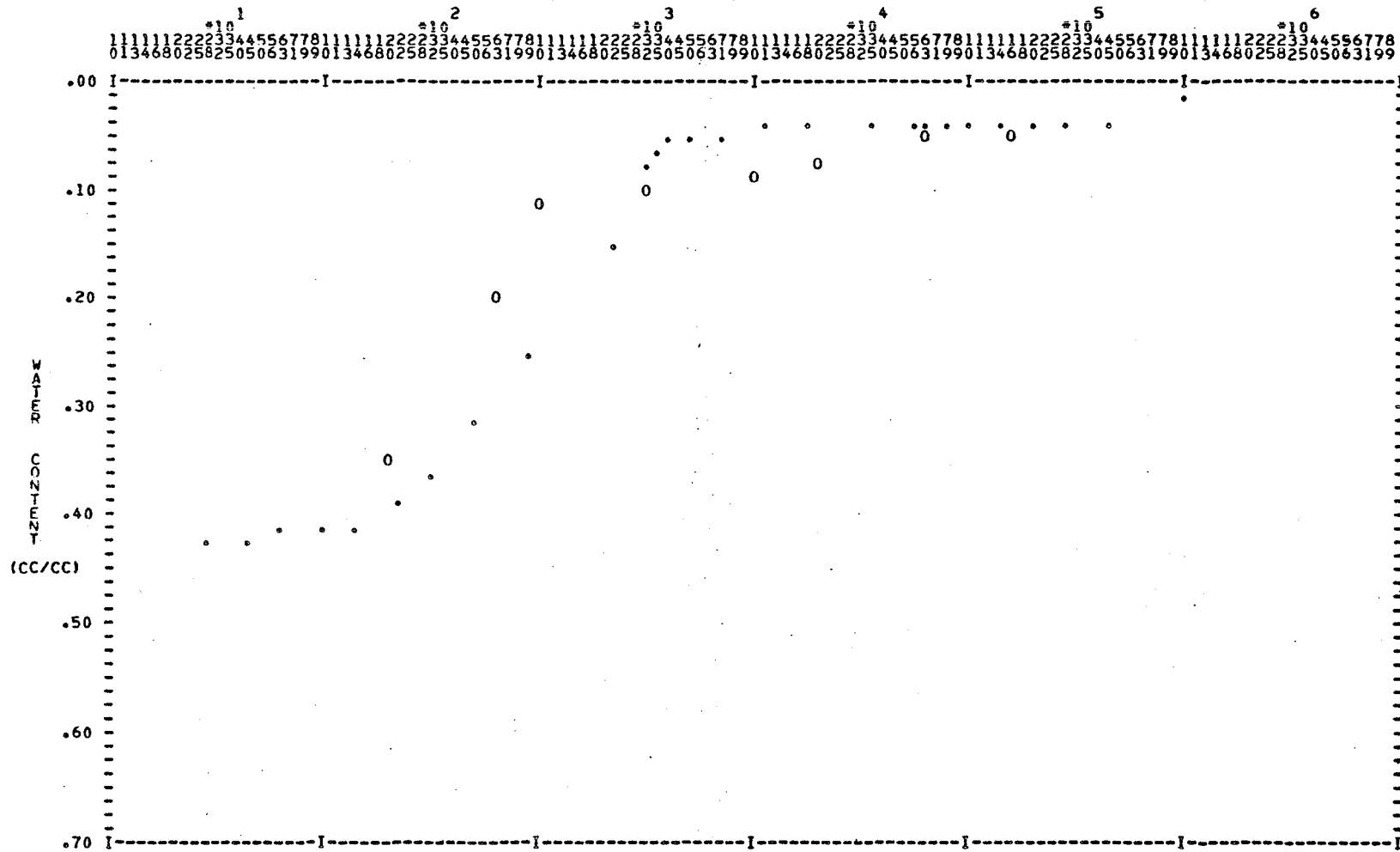
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	7.5	0.075
2.00	7.6	0.001
3.00	7.7	0.001
4.00	7.8	0.001
5.00	7.9	0.001
6.00	8.0	0.001
7.00	8.0	0.001
8.00	8.1	0.001
9.00	8.2	0.001
10.00	8.2	0.001
20.00	8.6	0.004
30.00	9.2	0.006
40.00	10.0	0.008
50.00	10.7	0.007
60.00	11.1	0.004
70.00	11.8	0.007
80.00	13.4	0.016
90.00	16.0	0.026
100.00	19.5	0.035
200.00	49.1	0.296
300.00	67.0	0.179
400.00	79.9	0.129
500.00	89.5	0.096
600.00	95.3	0.058
700.00	97.9	0.026
800.00	98.9	0.010
900.00	99.3	0.004
1000.00	99.4	0.001
2000.00	100.0	0.006

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.016	0.10094E+06
0.032	0.46241E+05
0.033	0.28255E+05
0.033	0.18891E+05
0.033	0.13555E+05
0.034	0.10226E+05
0.034	0.80104E+04
0.034	0.64568E+04
0.035	0.53233E+04
0.036	0.37066E+04
0.038	0.18442E+04
0.041	0.11318E+04
0.044	0.73672E+03
0.046	0.48369E+03
0.048	0.42084E+03
0.053	0.39001E+03
0.062	0.35131E+03
0.075	0.31346E+03
0.145	0.22910E+03
0.245	0.93337E+02
0.310	0.51721E+02
0.358	0.32986E+02
0.390	0.21850E+02
0.408	0.14399E+02
0.416	0.96864E+01
0.419	0.65280E+01
0.420	0.45876E+01
0.421	0.29398E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 10

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P<sub>SIM</sub>)-LOG(P<sub>SIP</sub>))) = 0.51374E+01

SOIL HORIZON NUMBER 11 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.49 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.036	0.150E+05
0.042	0.600E+04
0.049	0.200E+04
0.069	0.100E+04
0.077	0.330E+03
0.101	0.100E+03
0.174	0.600E+02
0.344	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	5.2	0.052
2.00	5.4	0.002
3.00	5.5	0.001
4.00	5.7	0.001
5.00	5.8	0.001
6.00	5.9	0.001
7.00	6.1	0.001
8.00	6.2	0.001
9.00	6.2	0.001
10.00	6.3	0.001
20.00	6.8	0.005
30.00	7.3	0.005
40.00	7.8	0.005
50.00	8.2	0.004
60.00	8.6	0.004
70.00	9.5	0.009
80.00	11.3	0.018
90.00	14.0	0.027
100.00	17.5	0.035
200.00	50.0	0.325
300.00	68.9	0.189
400.00	81.8	0.129
500.00	90.6	0.088
600.00	95.6	0.050
700.00	97.9	0.023
800.00	98.9	0.010
900.00	99.2	0.004
1000.00	99.4	0.002
2000.00	100.0	0.006

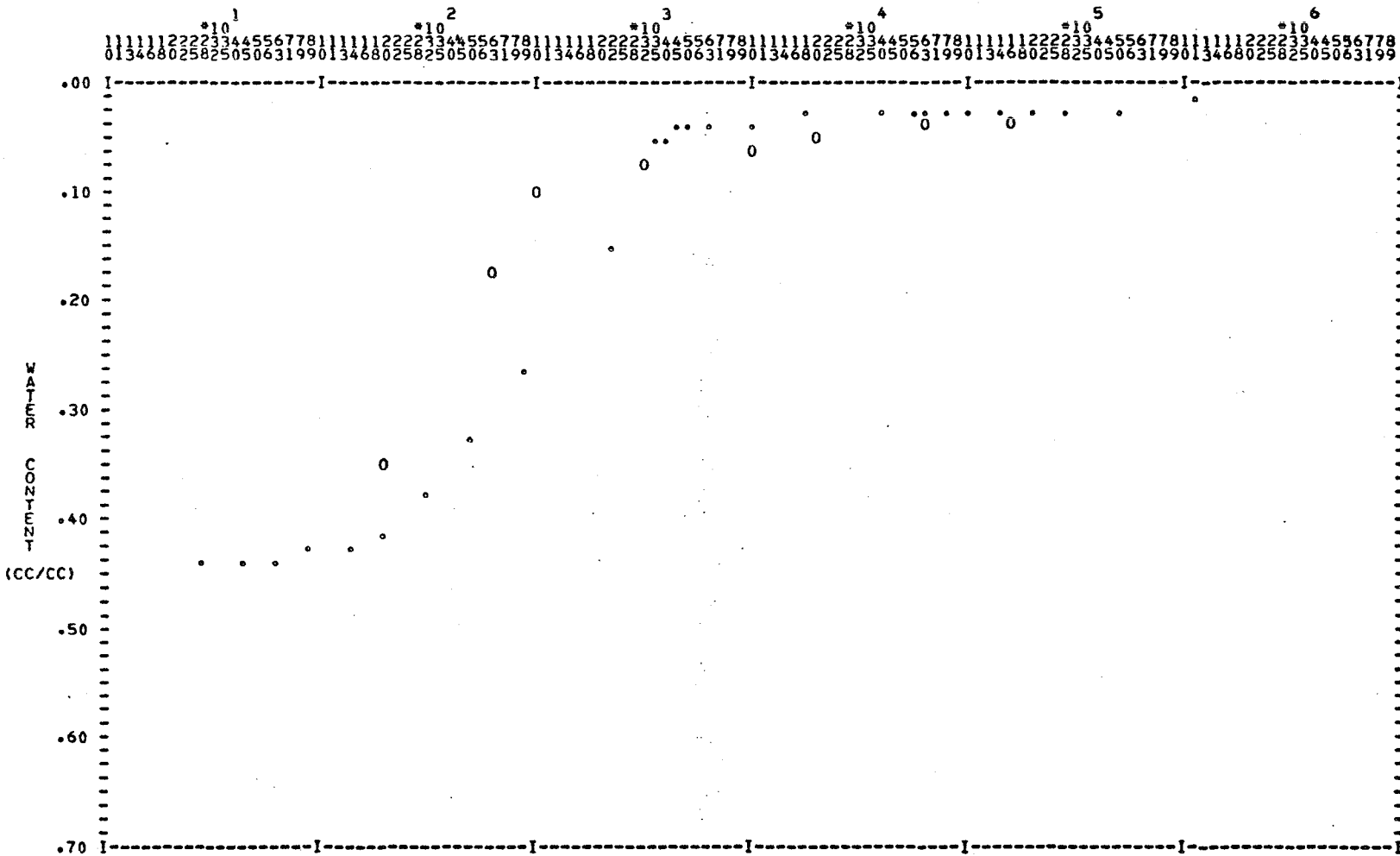
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.012	0.11549E+06
0.024	0.50096E+05
0.025	0.29648E+05
0.025	0.19619E+05
0.026	0.14000E+05
0.026	0.10530E+05
0.027	0.82294E+04
0.027	0.66223E+04
0.027	0.54526E+04
0.029	0.37837E+04
0.031	0.16895E+04
0.033	0.10070E+04
0.035	0.65451E+03
0.037	0.47318E+03
0.040	0.42862E+03
0.046	0.38683E+03
0.055	0.34314E+03
0.069	0.30343E+03
0.148	0.22616E+03
0.260	0.91483E+02
0.330	0.50131E+02
0.377	0.31448E+02
0.408	0.20621E+02
0.424	0.13663E+02
0.431	0.92747E+01
0.434	0.63472E+01
0.435	0.44914E+01
0.436	0.28506E+01

ALPHA = 1.38



SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 11

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.51331E+01

SOIL HORIZON NUMBER 12 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.51 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.030	0.150E+05
0.035	0.600E+04
0.062	0.200E+04
0.074	0.100E+04
0.089	0.330E+03
0.121	0.100E+03
0.213	0.600E+02
0.326	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

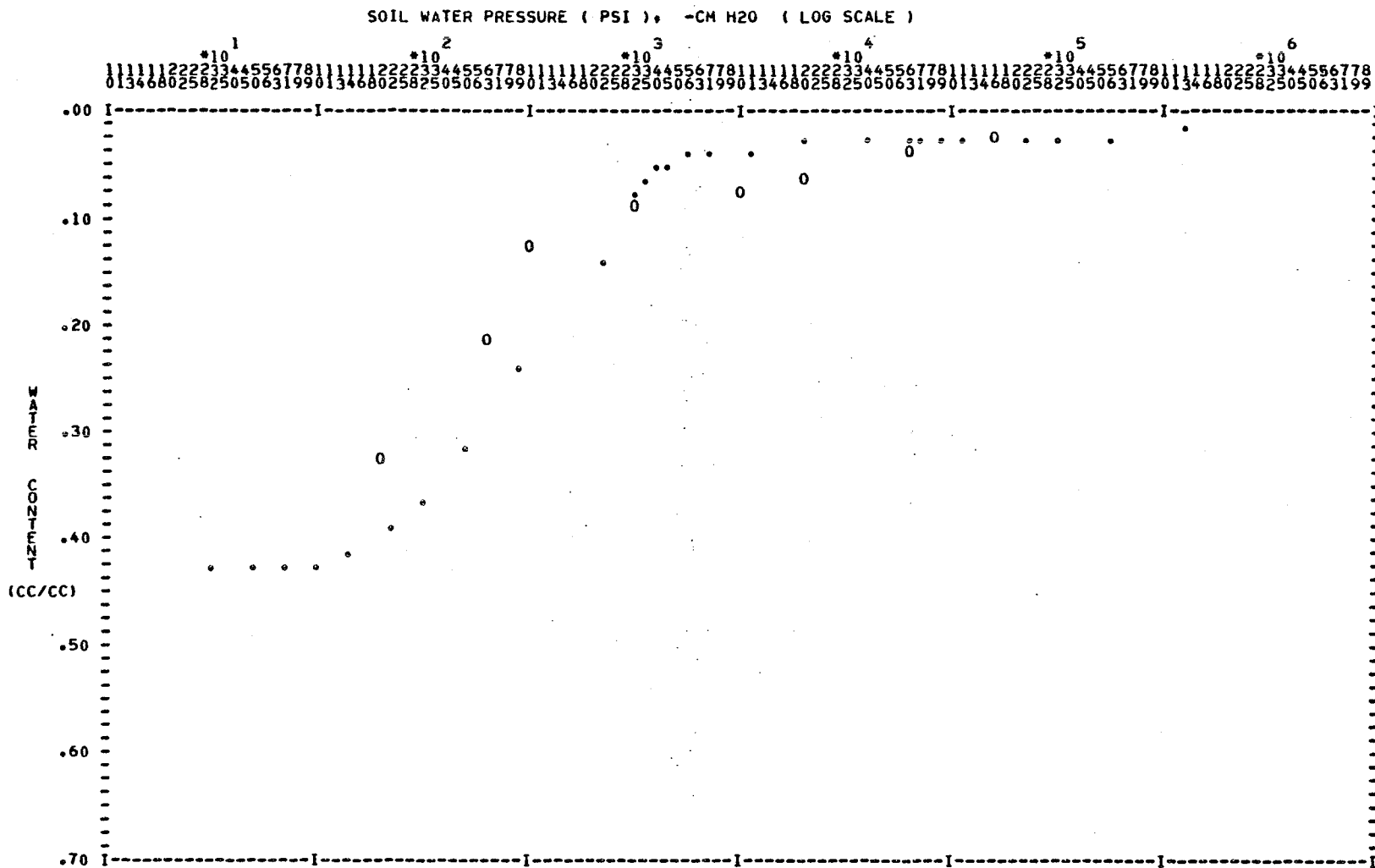
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	4.1	0.041
1.75	4.9	0.008
3.00	4.7	0.002
4.75	4.9	0.002
6.00	5.1	0.002
7.50	5.3	0.002
9.00	5.4	0.001
10.60	5.5	0.001
12.50	5.6	0.001
15.00	6.2	0.008
18.00	7.2	0.008
20.00	8.1	0.009
30.00	8.8	0.007
40.00	9.6	0.008
50.00	10.8	0.013
60.00	12.8	0.020
70.00	15.4	0.026
80.00	18.7	0.033
100.00	47.1	0.284
200.00	65.0	0.179
300.00	78.3	0.133
400.00	87.9	0.096
500.00	93.7	0.058
600.00	96.7	0.030
700.00	98.2	0.015
800.00	98.9	0.007
900.00	99.2	0.003
1000.00	100.0	0.008
2000.00		

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.009	0.12327E+06
0.019	0.54096E+05
0.020	0.32289E+05
0.021	0.21439E+05
0.022	0.15331E+05
0.023	0.11548E+05
0.023	0.90363E+04
0.023	0.72791E+04
0.024	0.59990E+04
0.026	0.41782E+04
0.029	0.18846E+04
0.033	0.11336E+04
0.036	0.74052E+03
0.040	0.54411E+03
0.044	0.46121E+03
0.051	0.39968E+03
0.061	0.34763E+03
0.073	0.30402E+03
0.141	0.22377E+03
0.241	0.91963E+02
0.308	0.51261E+02
0.358	0.32439E+02
0.391	0.21531E+02
0.410	0.14598E+02
0.419	0.10228E+02
0.424	0.72808E+01
0.426	0.51841E+01
0.428	0.30574E+01

ALPHA = 1.38

B-25



SOIL HORIZON NUMBER 13 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.54 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.054	0.150E+05
0.068	0.600E+04
0.088	0.200E+04
0.092	0.100E+04
0.122	0.330E+03
0.151	0.100E+03
0.203	0.600E+02
0.313	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	7.7	0.077
2.00	8.4	0.007
3.00	8.9	0.005
4.00	9.4	0.005
5.00	9.8	0.004
6.00	10.2	0.004
7.00	10.5	0.003
8.00	10.8	0.003
9.00	11.1	0.003
10.00	11.3	0.002
20.00	11.4	0.017
30.00	11.4	0.014
40.00	11.7	0.013
50.00	11.8	0.011
60.00	11.8	0.011
70.00	11.9	0.010
80.00	11.9	0.020
90.00	11.9	0.024
100.00	11.9	0.026
200.00	11.9	0.239
300.00	16.6	0.154
400.00	77.8	0.115
500.00	86.6	0.084
600.00	99.1	0.055
700.00	99.5	0.033
800.00	99.7	0.023
900.00	99.8	0.013
1000.00	99.8	0.005
2000.00	100.0	0.010

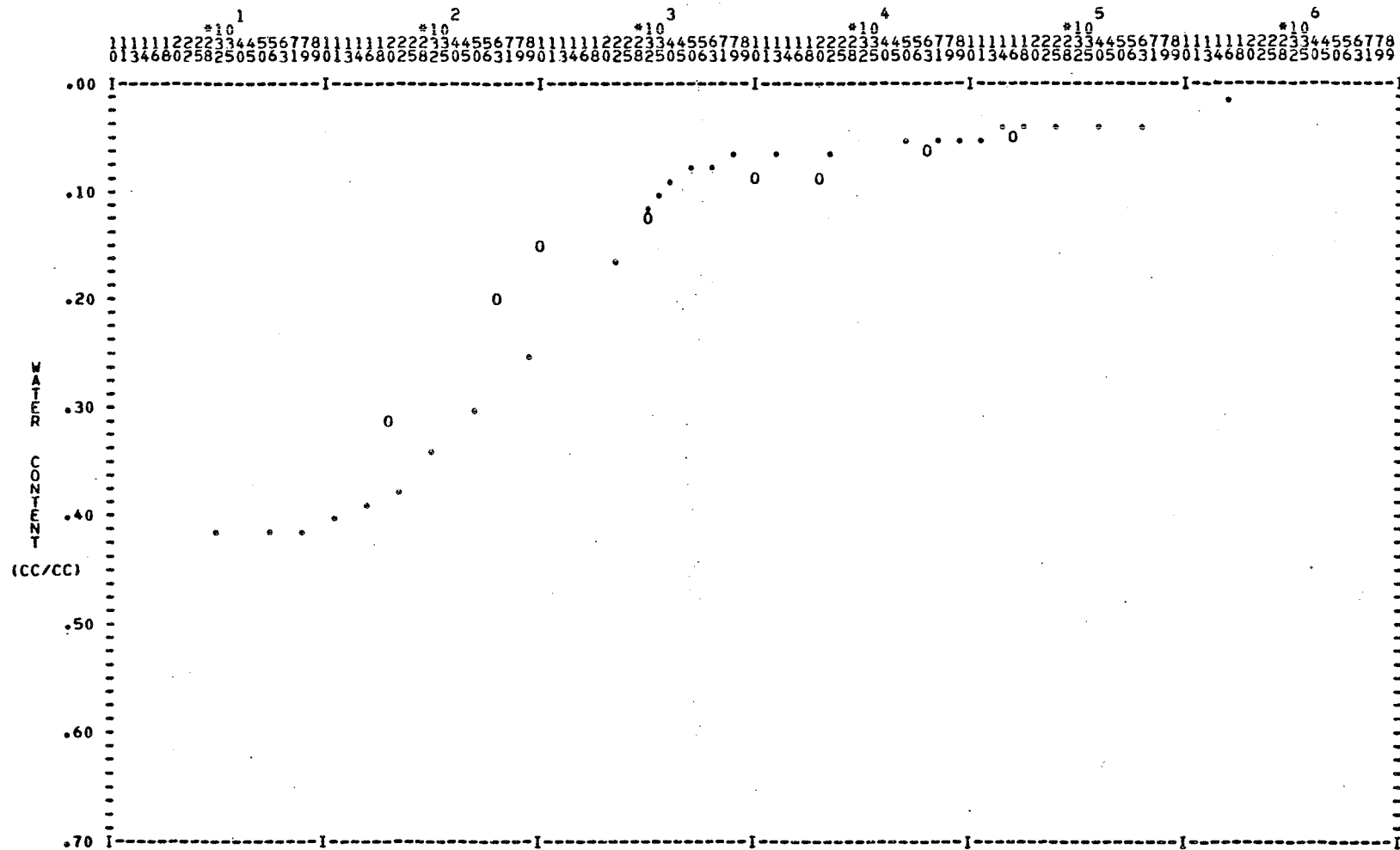
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.018	0.15526E+06
0.036	0.66002E+05
0.038	0.38503E+05
0.040	0.25383E+05
0.042	0.18099E+05
0.043	0.13617E+05
0.045	0.10653E+05
0.046	0.85835E+04
0.047	0.70781E+04
0.051	0.49567E+04
0.057	0.21416E+04
0.063	0.12580E+04
0.068	0.82095E+03
0.073	0.60416E+03
0.079	0.49179E+03
0.086	0.41167E+03
0.093	0.35109E+03
0.106	0.30160E+03
0.162	0.21401E+03
0.244	0.11046E+03
0.301	0.51339E+02
0.372	0.22903E+02
0.491	0.15407E+02
0.531	0.11196E+02
0.633	0.82363E+01
0.700	0.59212E+01
0.817	0.32646E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 14 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.54 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.026	0.150E+05
0.032	0.600E+04
0.035	0.200E+04
0.052	0.100E+04
0.068	0.330E+03
0.097	0.100E+03
0.160	0.600E+02
0.311	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

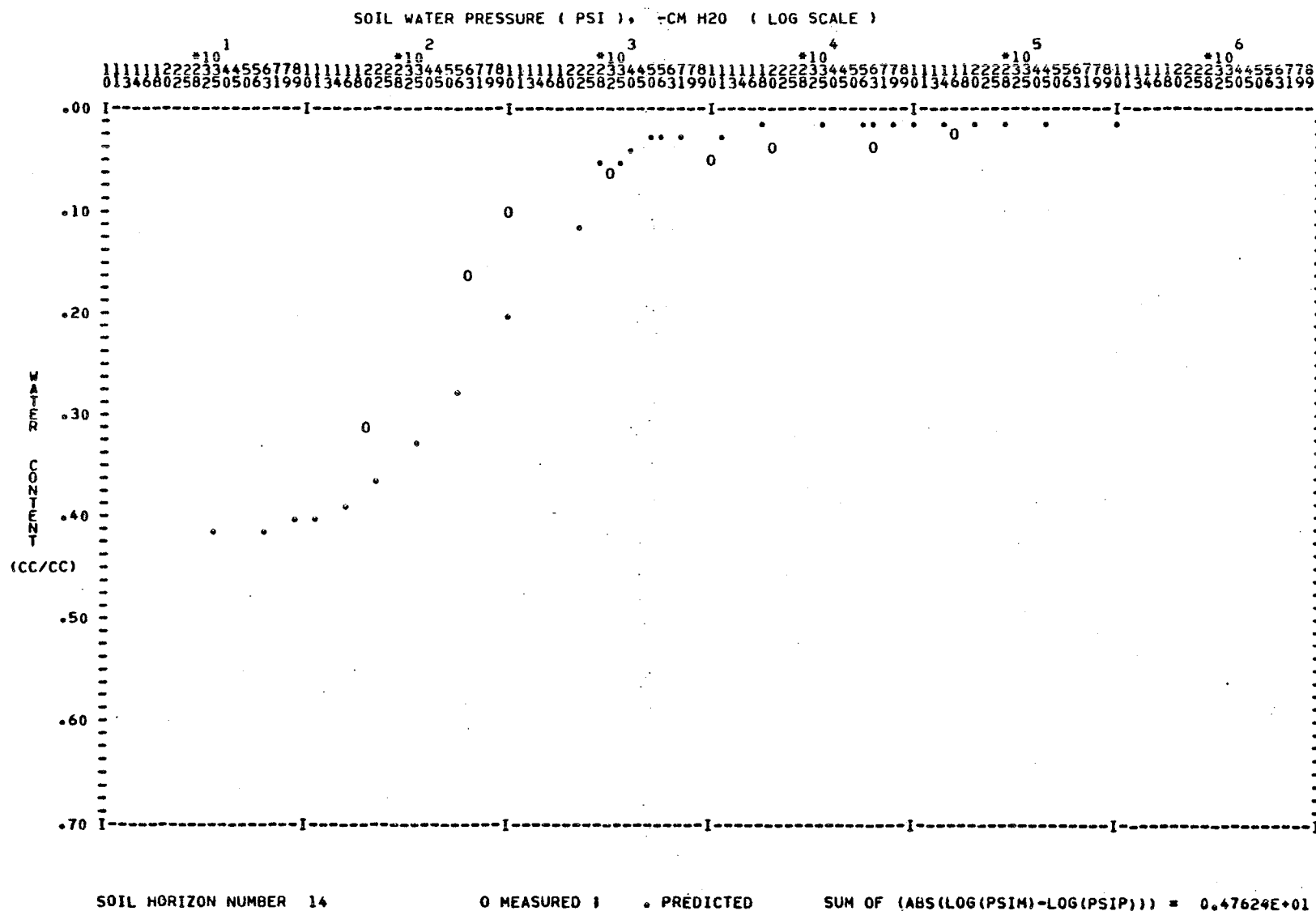
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	2.9	0.029
2.00	3.0	0.001
3.00	3.1	0.001
4.00	3.2	0.001
5.00	3.3	0.001
6.00	3.4	0.001
7.00	3.4	0.001
8.00	3.5	0.001
9.00	3.6	0.001
10.00	3.6	0.001
20.00	4.0	0.004
30.00	4.5	0.005
40.00	5.1	0.006
50.00	5.7	0.006
60.00	6.7	0.010
70.00	8.3	0.016
80.00	10.2	0.019
90.00	12.3	0.021
100.00	14.5	0.022
200.00	37.9	0.234
300.00	56.2	0.183
400.00	72.2	0.160
500.00	82.7	0.105
600.00	90.0	0.073
700.00	93.2	0.042
800.00	95.9	0.027
900.00	97.4	0.016
1000.00	98.2	0.008
2000.00	100.0	0.018

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.006	0.10259E+06
0.013	0.46847E+05
0.013	0.28567E+05
0.014	0.19081E+05
0.014	0.13679E+05
0.014	0.10315E+05
0.015	0.80756E+04
0.015	0.65059E+04
0.015	0.53609E+04
0.016	0.37237E+04
0.018	0.17828E+04
0.020	0.10922E+04
0.023	0.71694E+03
0.026	0.58202E+03
0.031	0.49244E+03
0.039	0.40803E+03
0.047	0.34101E+03
0.056	0.28869E+03
0.110	0.22077E+03
0.197	0.94518E+02
0.269	0.54425E+02
0.324	0.33380E+02
0.360	0.22391E+02
0.382	0.15916E+02
0.396	0.11680E+02
0.405	0.86850E+01
0.410	0.63522E+01
0.415	0.36503E+01

ALPHA = 1.38

B-29



SOIL HORIZON NUMBER 15 ( SEE TABLE 4 FOR IDENTIFICATION )

# DENSITY DATA:

BULK DENSITY = 1.52 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

# MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.040	0.150E+05
0.047	0.600E+04
0.071	0.200E+04
0.175	0.100E+04
0.196	0.330E+03
0.214	0.100E+03
0.231	0.600E+02
0.287	0.200E+02

# PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	4.8	0.048
2.00	6.2	0.014
3.00	7.1	0.009
4.00	7.9	0.008
5.00	8.6	0.007
6.00	9.3	0.007
7.00	10.0	0.007
8.00	10.7	0.006
9.00	11.3	0.006
10.00	11.9	0.006
20.00	17.0	0.051
30.00	21.1	0.041
40.00	24.4	0.033
50.00	27.0	0.026
60.00	29.2	0.022
70.00	31.2	0.019
80.00	32.9	0.017
90.00	34.5	0.016
100.00	35.9	0.014
200.00	47.7	0.118
300.00	58.7	0.111
400.00	67.3	0.086
500.00	73.9	0.066
600.00	79.3	0.054
700.00	83.8	0.045
800.00	87.7	0.039
900.00	91.1	0.034
1000.00	94.1	0.030
2000.00	100.0	0.059

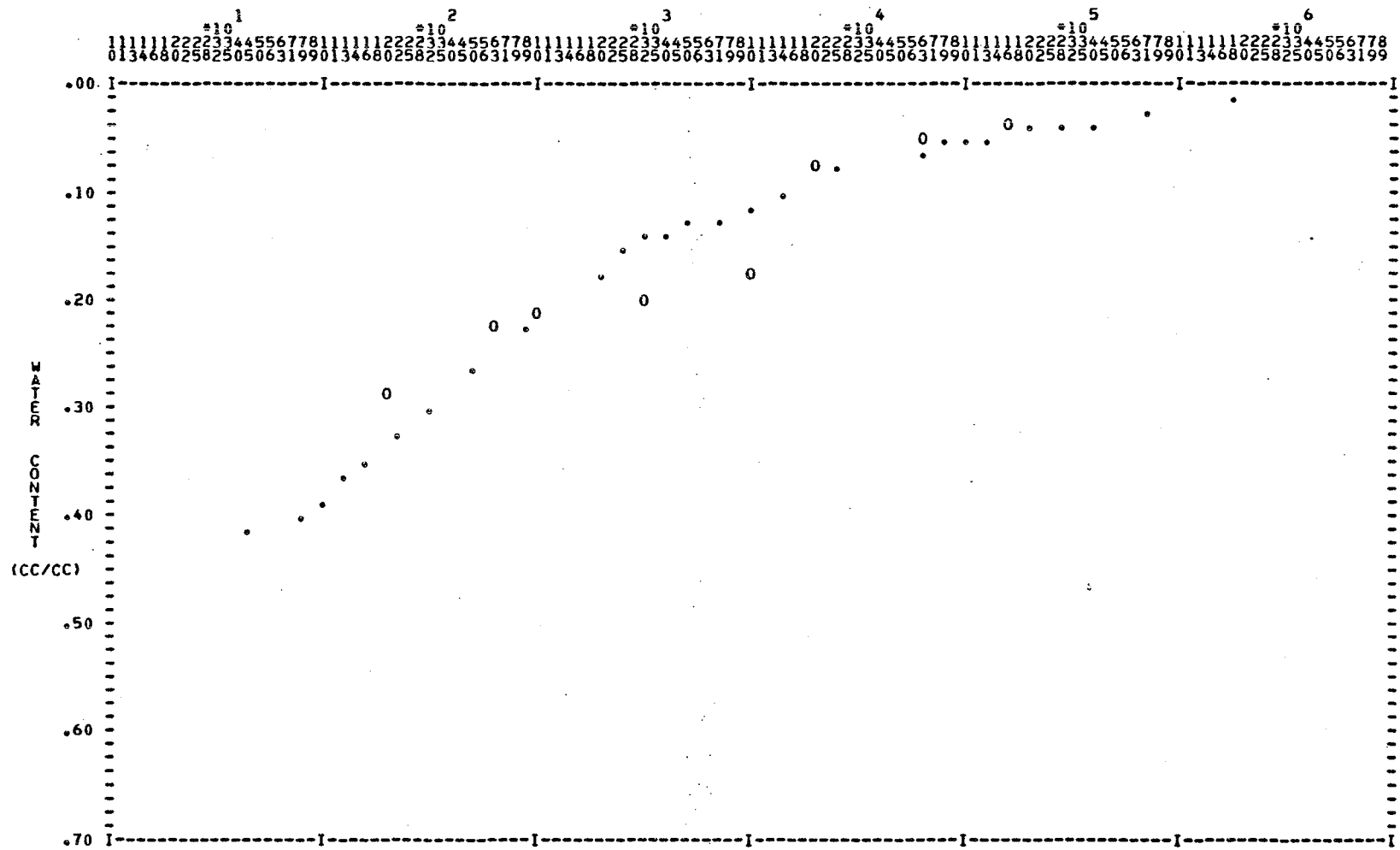
# PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.013	0.17574E+06
0.028	0.72600E+05
0.032	0.41752E+05
0.035	0.27741E+05
0.038	0.20032E+05
0.041	0.15276E+05
0.044	0.12107E+05
0.047	0.98771E+04
0.049	0.82402E+04
0.062	0.60541E+04
0.081	0.26015E+04
0.097	0.14692E+04
0.110	0.95040E+03
0.128	0.67092E+03
0.129	0.59035E+03
0.137	0.39379E+03
0.144	0.31749E+03
0.150	0.26219E+03
0.178	0.19079E+03
0.227	0.84552E+02
0.269	0.47477E+02
0.301	0.30476E+02
0.327	0.21380E+02
0.348	0.15926E+02
0.366	0.12359E+02
0.381	0.98914E+01
0.395	0.81087E+01
0.414	0.45037E+01

ALPHA = 1.38



SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 16 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.75 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.058	0.150E+05
0.075	0.600E+04
0.103	0.200E+04
0.173	0.100E+04
0.199	0.330E+03
0.213	0.100E+03
0.231	0.600E+02
0.269	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

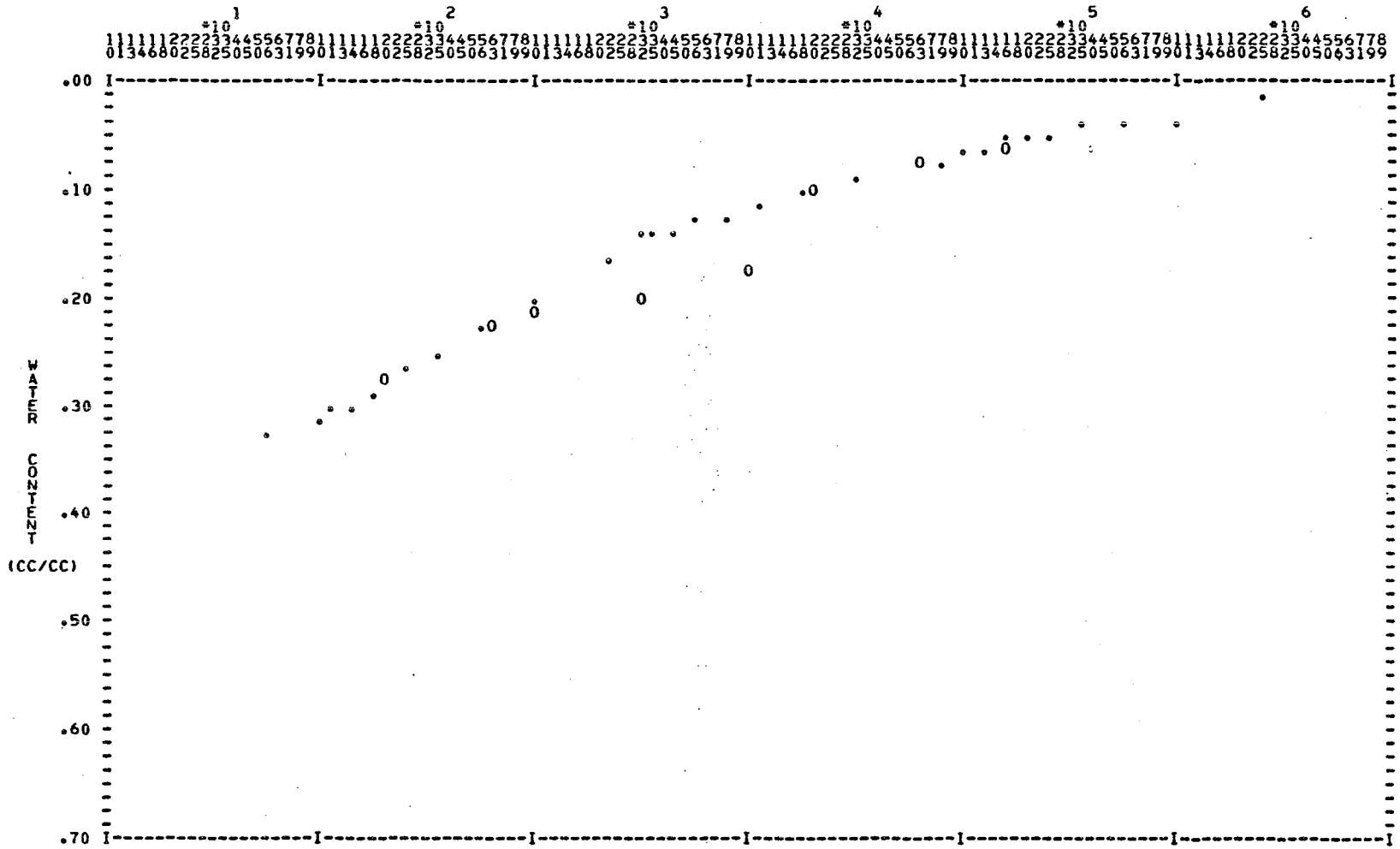
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	6.3	0.063
2.00	9.1	0.028
3.00	10.8	0.017
4.00	12.3	0.014
5.00	13.5	0.012
6.00	14.6	0.011
7.00	15.6	0.010
8.00	16.5	0.009
9.00	17.4	0.009
10.00	18.2	0.008
20.00	24.8	0.066
30.00	29.5	0.047
40.00	32.9	0.034
50.00	35.5	0.026
60.00	37.5	0.020
70.00	39.1	0.016
80.00	40.5	0.014
90.00	41.7	0.013
100.00	42.9	0.012
200.00	52.9	0.100
300.00	62.7	0.098
400.00	70.2	0.075
500.00	76.1	0.059
600.00	80.9	0.048
700.00	85.0	0.041
800.00	88.6	0.035
900.00	91.7	0.031
1000.00	94.4	0.027
2000.00	100.0	0.056

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.015	0.24032E+06
0.034	0.98711E+05
0.039	0.55972E+05
0.044	0.36727E+05
0.048	0.26257E+05
0.051	0.19863E+05
0.055	0.15641E+05
0.058	0.12691E+05
0.061	0.10539E+05
0.073	0.76295E+04
0.092	0.32103E+04
0.106	0.17823E+04
0.116	0.11377E+04
0.124	0.79000E+03
0.130	0.58452E+03
0.135	0.45406E+03
0.140	0.36560E+03
0.144	0.30250E+03
0.163	0.22254E+03
0.196	0.99304E+02
0.226	0.55571E+02
0.249	0.35804E+02
0.267	0.25174E+02
0.282	0.18784E+02
0.295	0.14594E+02
0.306	0.11688E+02
0.316	0.95857E+01
0.330	0.53614E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 16

0 MEASURED ;      . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.17508E+01

SOIL HORIZON NUMBER 17 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.70 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.107	0.150E+05
0.114	0.600E+04
0.136	0.200E+04
0.172	0.100E+04
0.189	0.330E+03
0.202	0.100E+03
0.224	0.600E+02
0.267	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

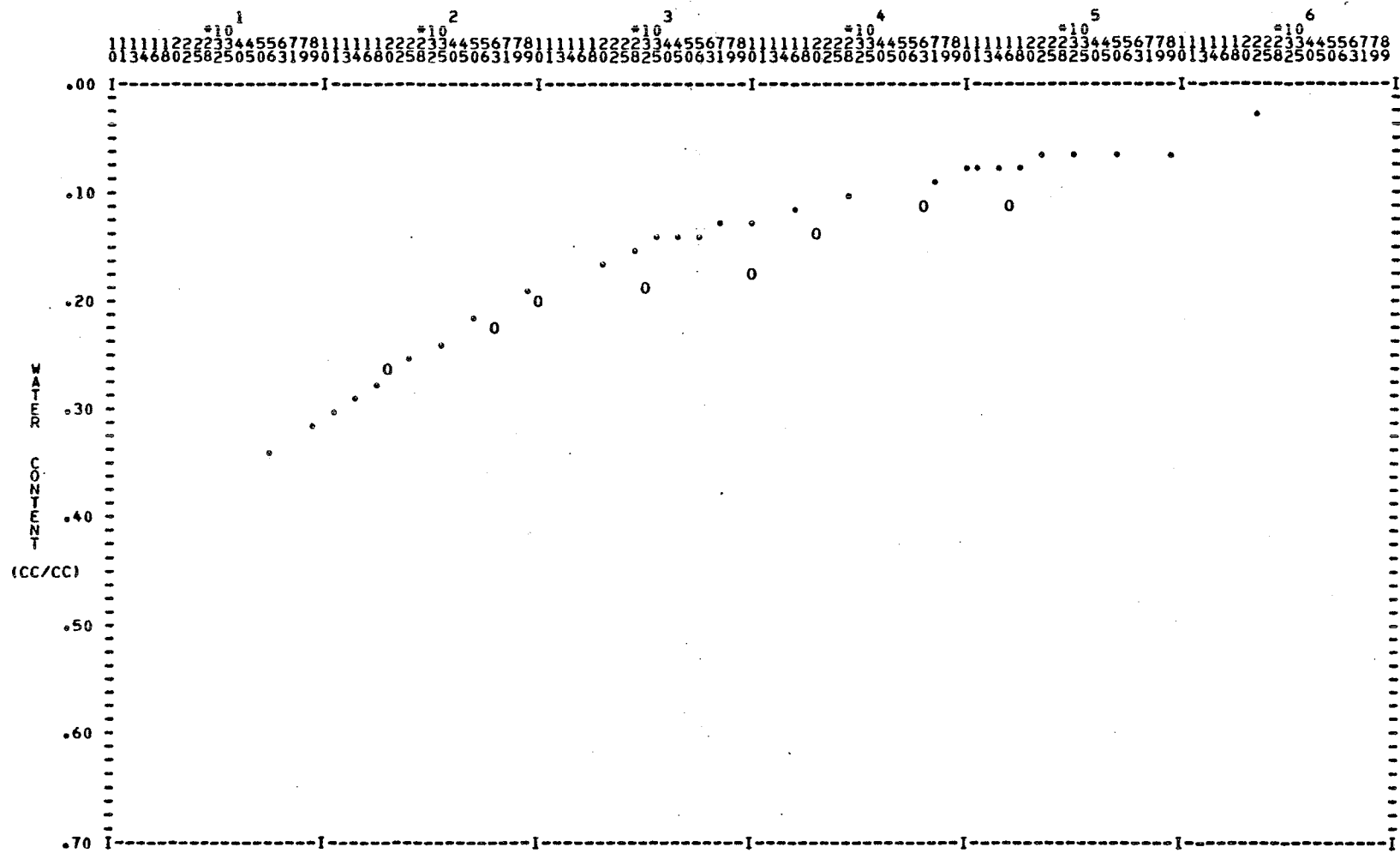
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	13.1	0.131
2.00	15.1	0.020
3.00	16.3	0.012
4.00	17.4	0.010
5.00	18.3	0.009
6.00	19.1	0.008
7.00	19.8	0.007
8.00	20.5	0.007
9.00	21.1	0.006
10.00	21.7	0.006
20.00	26.5	0.048
30.00	29.9	0.034
40.00	32.4	0.025
50.00	34.4	0.020
60.00	36.1	0.017
70.00	37.5	0.015
80.00	38.8	0.013
90.00	40.0	0.011
100.00	41.0	0.010
200.00	49.6	0.086
300.00	56.7	0.070
400.00	63.3	0.066
500.00	68.9	0.056
600.00	74.0	0.051
700.00	78.7	0.047
800.00	82.8	0.041
900.00	86.3	0.035
1000.00	89.1	0.028
2000.00	100.0	0.109

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.027	0.21635E+06
0.056	0.88937E+05
0.060	0.50482E+05
0.064	0.33143E+05
0.067	0.23702E+05
0.070	0.17934E+05
0.072	0.14124E+05
0.075	0.11461E+05
0.077	0.95187E+04
0.086	0.68913E+04
0.101	0.28925E+04
0.111	0.16126E+04
0.120	0.10408E+04
0.130	0.73441E+03
0.137	0.54990E+03
0.147	0.42886E+03
0.149	0.34448E+03
0.150	0.28402E+03
0.151	0.20754E+03
0.152	0.18941E+03
0.153	0.17179E+03
0.154	0.15407E+03
0.155	0.13888E+03
0.156	0.12508E+03
0.157	0.11440E+03
0.158	0.10451E+03
0.159	0.94519E+02
0.160	0.85837E+02

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 17

0 MEASURED ;      . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.37935E+01

SOIL HORIZON NUMBER 1A ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.73 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.151	0.150E+05
0.171	0.600E+04
0.190	0.200E+04
0.178	0.100E+04
0.195	0.330E+03
0.211	0.100E+03
0.225	0.600E+02
0.261	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

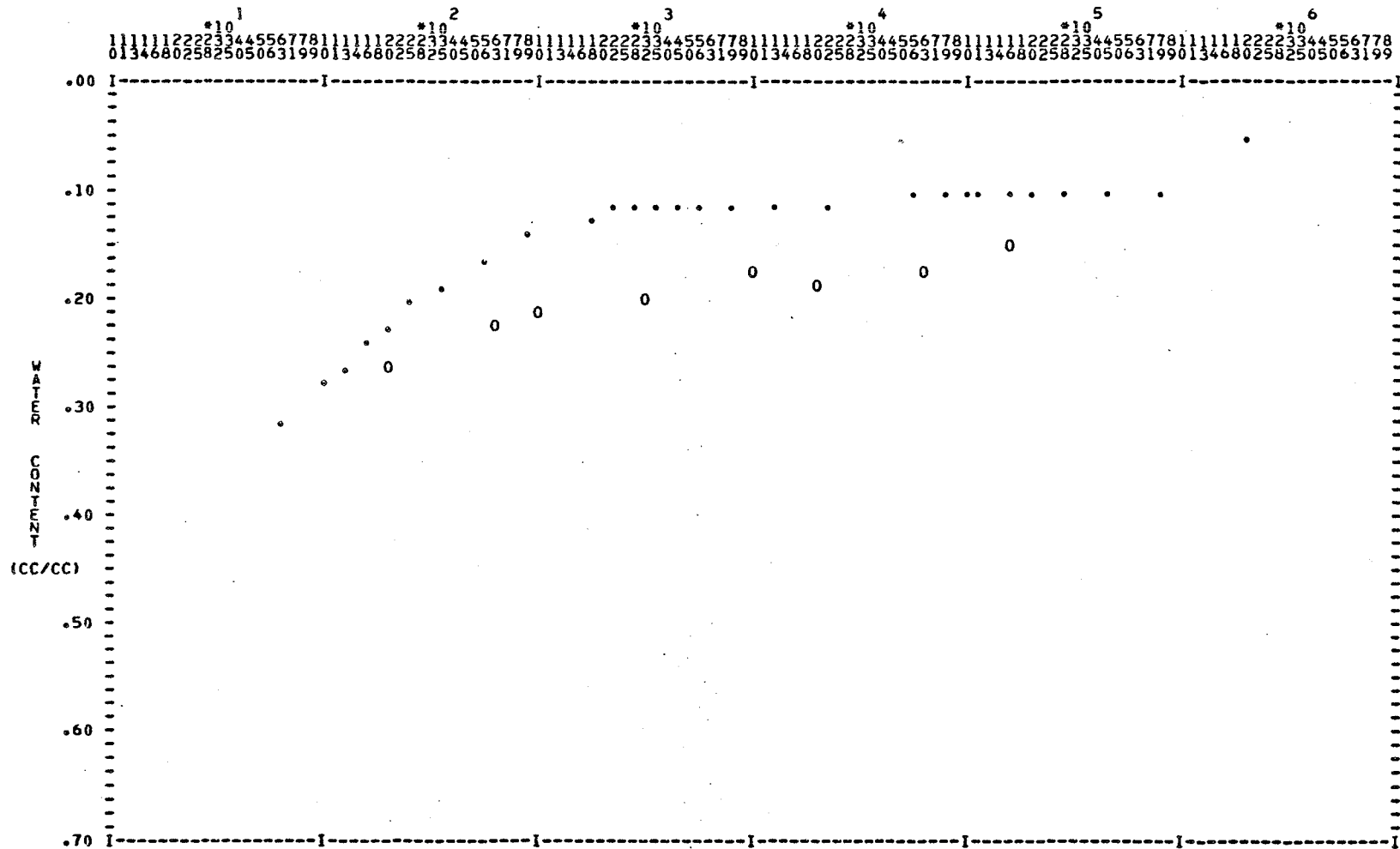
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	25.8	0.258
2.00	26.9	0.011
3.00	27.5	0.006
4.00	28.0	0.005
5.00	28.4	0.004
6.00	28.7	0.003
7.00	28.9	0.003
8.00	29.2	0.002
9.00	29.4	0.002
10.00	29.6	0.002
20.00	30.8	0.012
30.00	31.5	0.007
40.00	32.1	0.005
50.00	32.5	0.004
60.00	32.9	0.004
70.00	33.3	0.004
80.00	33.7	0.004
90.00	34.0	0.003
100.00	34.3	0.003
200.00	34.4	0.041
300.00	43.1	0.047
400.00	49.9	0.064
500.00	55.5	0.065
600.00	62.0	0.061
700.00	67.1	0.056
800.00	72.6	0.050
900.00	76.0	0.043
1000.00	80.5	0.036
2000.00	100.0	0.195

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.047	0.19738E+06
0.094	0.80301E+05
0.096	0.44622E+05
0.098	0.28768E+05
0.099	0.20260E+05
0.100	0.15129E+05
0.101	0.11780E+05
0.103	0.94633E+04
0.105	0.77897E+04
0.108	0.59435E+04
0.110	0.42233E+04
0.112	0.28328E+04
0.114	0.17927E+04
0.116	0.97215E+03
0.118	0.44060E+03
0.120	0.34745E+03
0.122	0.28300E+03
0.124	0.22979E+03
0.126	0.18423E+03
0.128	0.14301E+03
0.130	0.10300E+03
0.132	0.73861E+02
0.134	0.52916E+02
0.136	0.38619E+02
0.138	0.28215E+02
0.140	0.20407E+02
0.142	0.15229E+02

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 19 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.68 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.163	0.150E+05
0.178	0.600E+04
0.202	0.200E+04
0.192	0.100E+04
0.207	0.330E+03
0.225	0.100E+03
0.244	0.600E+02
0.272	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	28.7	0.287
2.00	29.3	0.006
3.00	29.7	0.004
4.00	30.0	0.003
5.00	30.2	0.002
6.00	30.4	0.002
7.00	30.5	0.002
8.00	30.7	0.001
9.00	30.8	0.001
10.00	30.9	0.001
20.00	31.7	0.008
30.00	32.2	0.005
40.00	32.5	0.003
50.00	32.8	0.003
60.00	33.0	0.002
70.00	33.3	0.002
80.00	33.5	0.002
90.00	33.6	0.002
100.00	33.8	0.002
200.00	35.8	0.020
300.00	38.9	0.027
400.00	44.9	0.059
500.00	51.0	0.065
600.00	58.3	0.073
700.00	65.8	0.075
800.00	72.9	0.067
900.00	78.0	0.055
1000.00	82.2	0.042
2000.00	100.0	0.178

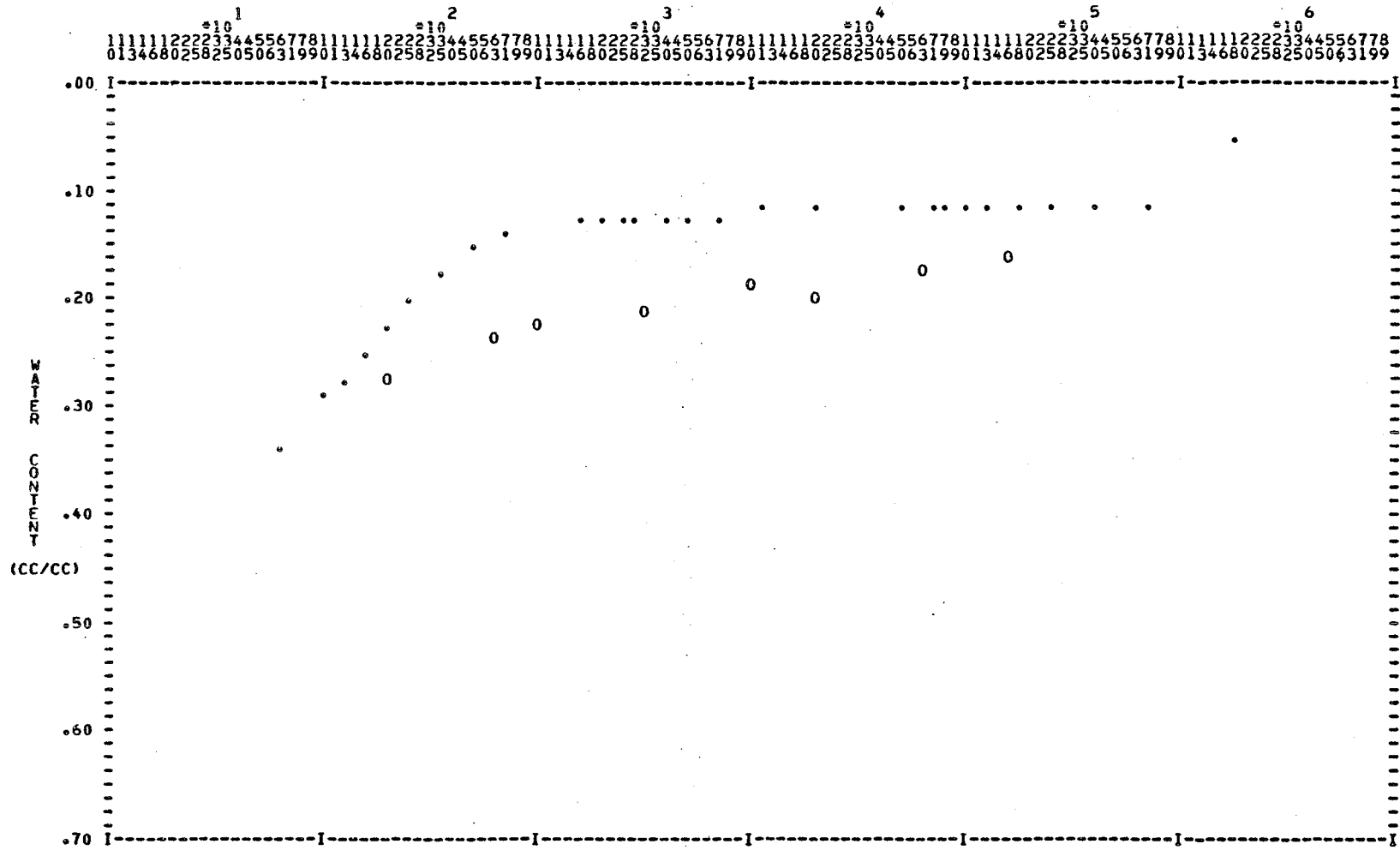
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE (-CM H2O )
0.054	0.17118E+06
0.108	0.69734E+05
0.109	0.38847E+05
0.110	0.25093E+05
0.111	0.17699E+05
0.111	0.13235E+05
0.112	0.10317E+05
0.113	0.82972E+04
0.113	0.68364E+04
0.115	0.48080E+04
0.117	0.19644E+04
0.118	0.10891E+04
0.120	0.70048E+03
0.120	0.49928E+03
0.121	0.37888E+03
0.122	0.29668E+03
0.123	0.23826E+03
0.123	0.19527E+03
0.124	0.15521E+03
0.126	0.73334E+02
0.130	0.50240E+02
0.135	0.34501E+02
0.140	0.25681E+02
0.145	0.19895E+02
0.150	0.15534E+02
0.155	0.12303E+02
0.160	0.98155E+01
0.333	0.63034E+01

ALPHA = 1.38



SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 19

0 MEASURED 8

• PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.10834E+02

SOIL HORIZON NUMBER 20 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.69 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.115	0.150E+05
0.139	0.600E+04
0.189	0.200E+04
0.257	0.100E+04
0.265	0.330E+03
0.282	0.100E+03
0.294	0.600E+02
0.309	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

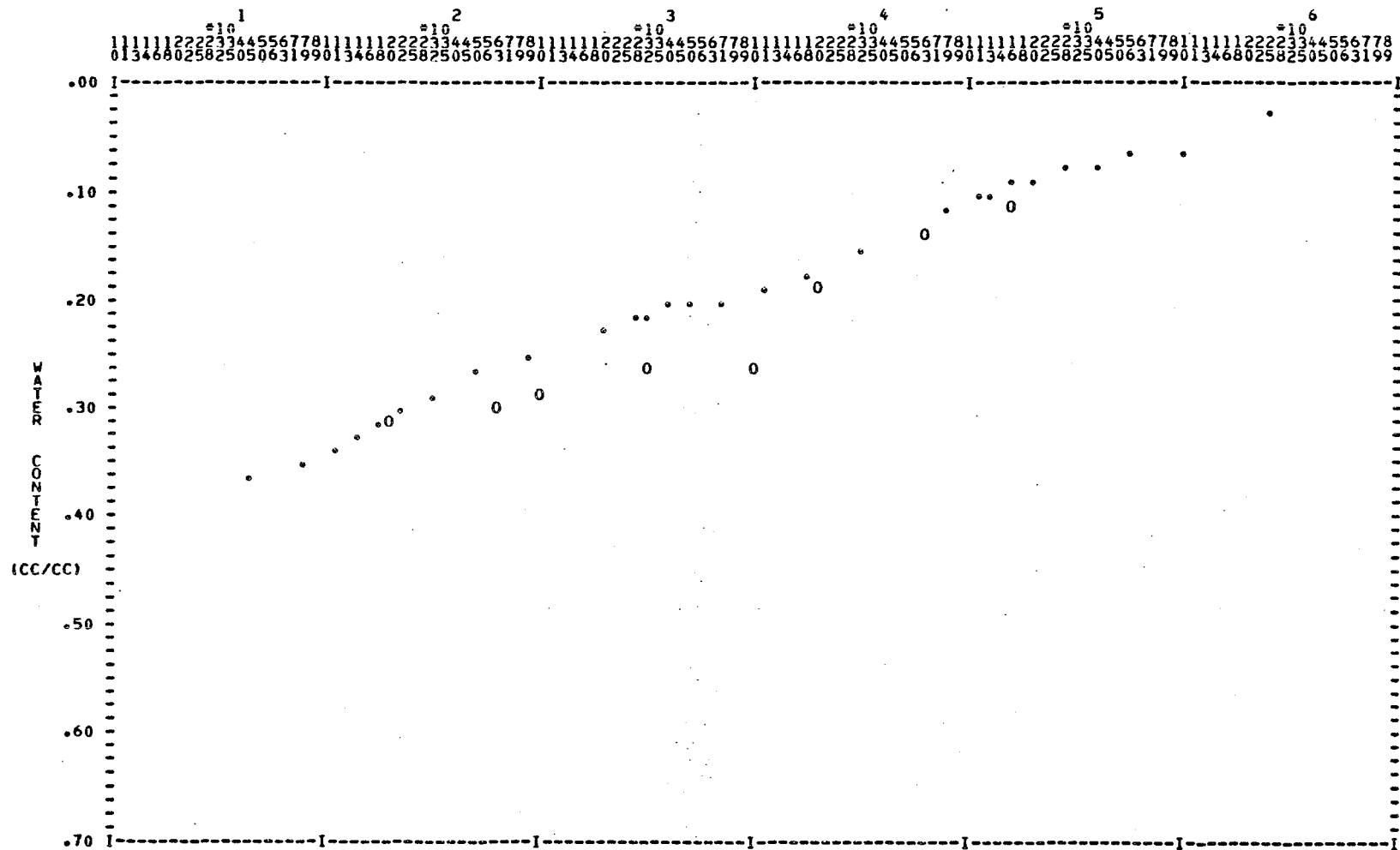
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	11.5	0.115
2.00	15.1	0.036
3.00	17.5	0.024
4.00	19.7	0.021
5.00	21.5	0.019
6.00	23.2	0.017
7.00	24.7	0.015
8.00	26.0	0.014
9.00	27.3	0.013
10.00	28.5	0.012
20.00	37.0	0.085
30.00	44.3	0.073
40.00	49.9	0.056
50.00	53.0	0.031
60.00	55.9	0.016
70.00	57.7	0.011
80.00	59.6	0.009
90.00	61.3	0.009
100.00	62.8	0.009
200.00	64.9	0.066
300.00	70.6	0.057
400.00	76.3	0.047
500.00	81.0	0.043
600.00	85.3	0.041
700.00	89.9	0.024
800.00	92.9	0.026
900.00	97.4	0.018
1000.00	97.4	0.018
2000.00	100.0	0.028

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.027	0.24043E+06
0.059	0.10018E+06
0.067	0.57536E+05
0.075	0.37827E+05
0.081	0.27001E+05
0.087	0.20367E+05
0.092	0.15985E+05
0.097	0.12926E+05
0.101	0.10698E+05
0.119	0.76302E+04
0.147	0.33217E+04
0.171	0.18602E+04
0.186	0.11225E+04
0.195	0.72059E+03
0.200	0.51604E+03
0.203	0.39741E+03
0.206	0.27329E+03
0.233	0.15567E+03
0.258	0.83240E+02
0.266	0.50296E+02
0.280	0.30255E+02
0.288	0.25468E+02
0.301	0.17380E+02
0.317	0.13790E+02
0.340	0.10748E+02
0.349	0.83837E+01
0.357	0.44719E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 20

0 MEASURED 1

PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.35424E+01

SOIL HORIZON NUMBER 21 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.58 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.068	0.150E+05
0.095	0.600E+04
0.152	0.200E+04
0.242	0.100E+04
0.262	0.330E+03
0.280	0.100E+03
0.291	0.600E+02
0.324	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

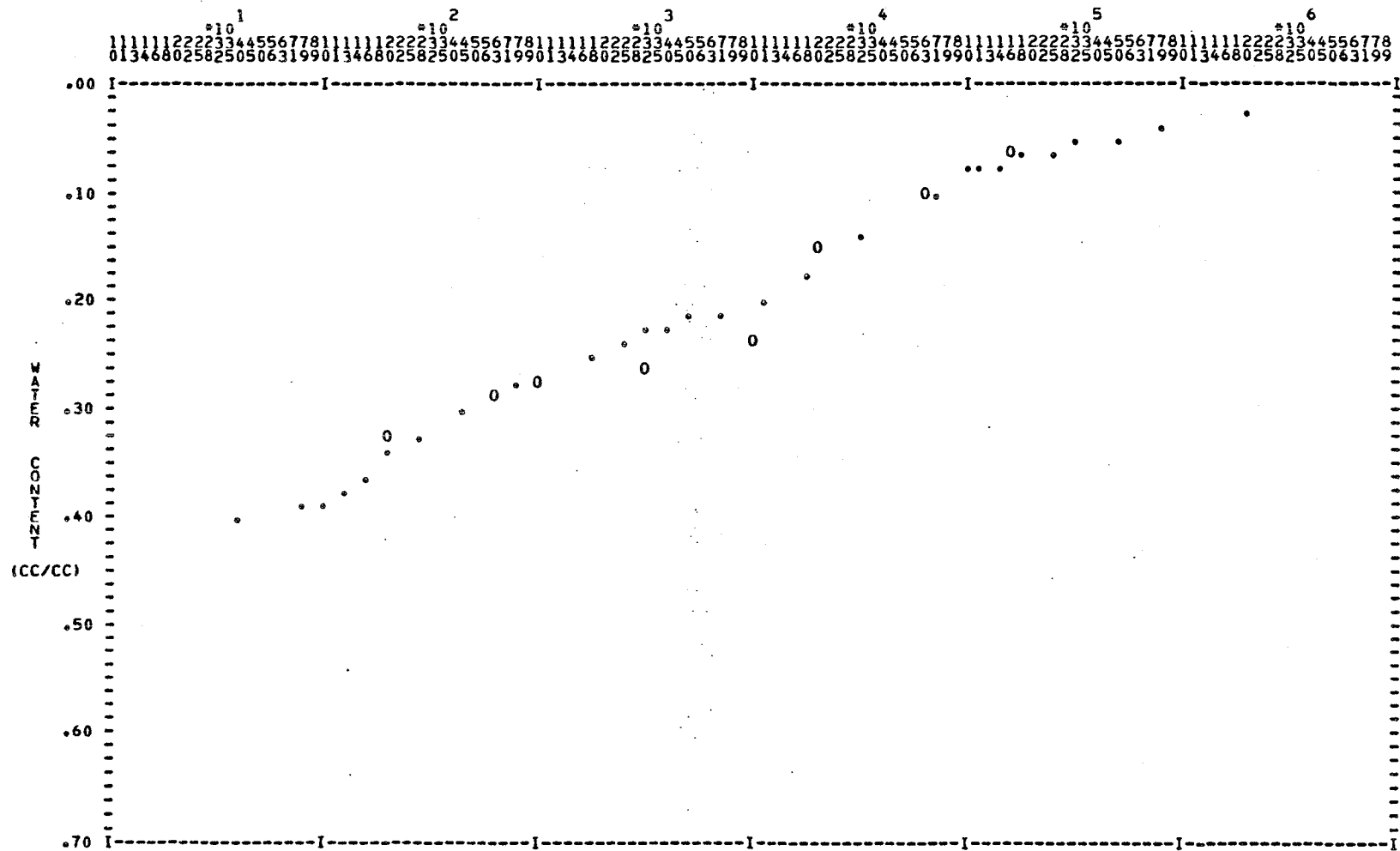
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	8.1	0.081
2.00	9.9	0.018
3.00	11.3	0.014
4.00	12.8	0.015
5.00	14.2	0.014
6.00	15.6	0.013
7.00	16.8	0.013
8.00	18.0	0.012
9.00	19.1	0.011
10.00	20.2	0.011
20.00	28.6	0.084
30.00	38.6	0.100
40.00	47.1	0.084
50.00	51.4	0.043
60.00	53.3	0.019
70.00	54.7	0.014
80.00	55.9	0.012
90.00	57.0	0.011
100.00	58.2	0.012
200.00	66.4	0.082
300.00	72.8	0.064
400.00	78.3	0.055
500.00	82.7	0.044
600.00	86.6	0.039
700.00	90.3	0.036
800.00	93.3	0.030
900.00	95.7	0.024
1000.00	97.4	0.017
2000.00	100.0	0.026

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.020	0.19413E+06
0.043	0.83107E+05
0.049	0.49214E+05
0.055	0.32887E+05
0.060	0.23729E+05
0.065	0.18043E+05
0.070	0.14249E+05
0.075	0.11582E+05
0.079	0.96274E+04
0.099	0.69666E+04
0.136	0.32295E+04
0.173	0.18436E+04
0.199	0.10953E+04
0.211	0.68502E+03
0.218	0.49559E+03
0.223	0.38391E+03
0.228	0.31258E+03
0.233	0.26331E+03
0.252	0.18684E+03
0.281	0.79743E+02
0.305	0.45741E+02
0.325	0.29541E+02
0.342	0.21107E+02
0.357	0.15987E+02
0.371	0.12346E+02
0.381	0.96841E+01
0.390	0.76616E+01
0.399	0.40384E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 21

0 MEASURED :

. PREDICTED

SUM OF (ABS(LOG(P<sub>sim</sub>)-LOG(P<sub>i</sub>P))) = 0.15422E+01

SOIL HORIZON NUMBER 22 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.62 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.128	0.150E+05
0.152	0.600E+04
0.188	0.200E+04
0.214	0.100E+04
0.243	0.330E+03
0.269	0.100E+03
0.285	0.600E+02
0.308	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	16.2	0.162
2.00	18.5	0.023
3.00	20.1	0.016
4.00	21.6	0.015
5.00	22.9	0.013
6.00	24.1	0.012
7.00	25.2	0.011
8.00	26.2	0.010
9.00	27.1	0.009
10.00	28.0	0.009
20.00	34.7	0.067
30.00	40.7	0.060
40.00	45.5	0.048
50.00	48.4	0.029
60.00	50.0	0.016
70.00	51.1	0.011
80.00	51.9	0.009
90.00	52.8	0.009
100.00	53.7	0.009
200.00	60.9	0.072
300.00	67.4	0.068
400.00	70.9	0.035
500.00	74.4	0.035
600.00	77.7	0.033
700.00	80.8	0.031
800.00	82.4	0.016
900.00	84.2	0.018
1000.00	87.2	0.030
2000.00	100.0	0.028

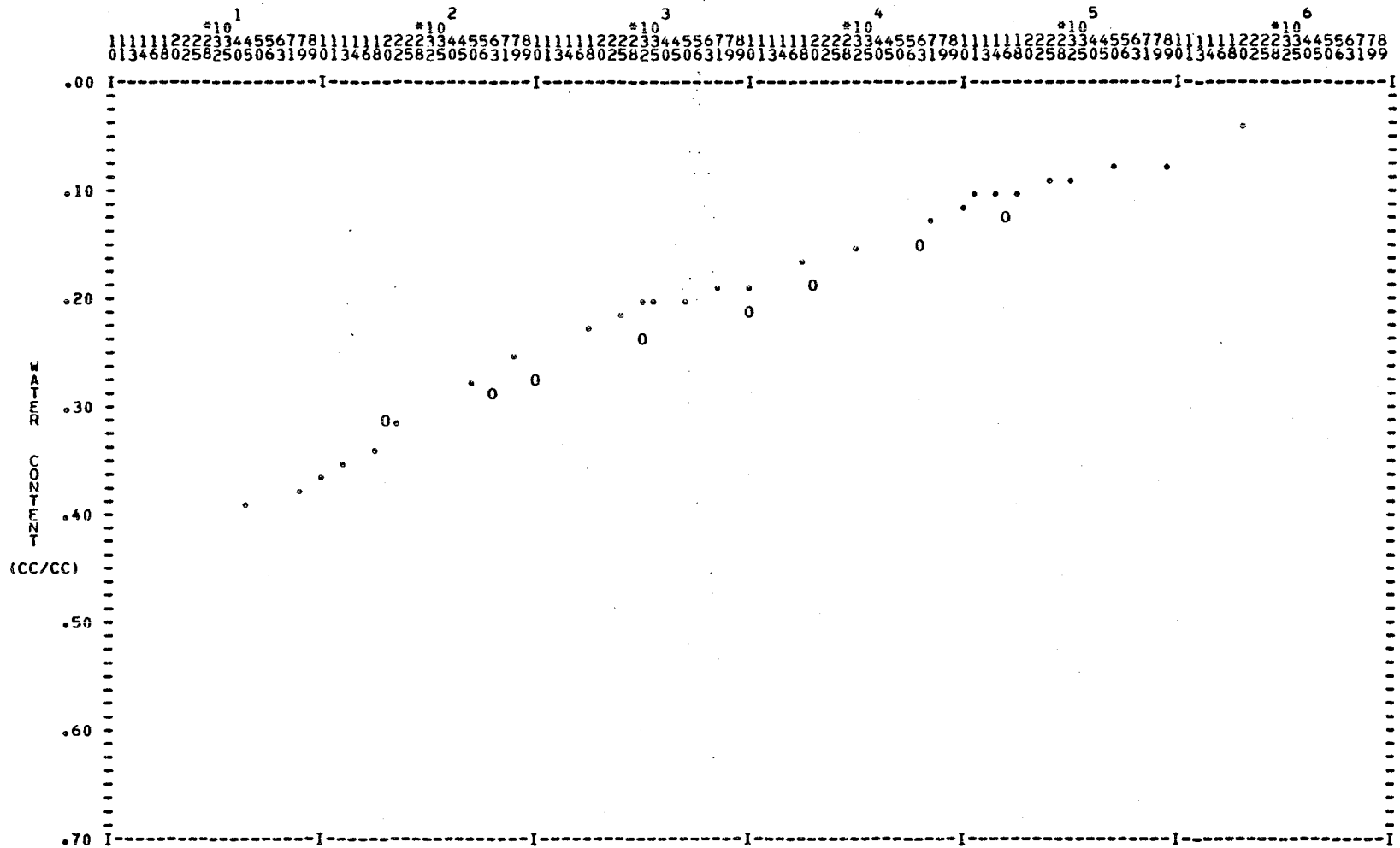
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.036	0.20892E+06
0.075	0.87475E+05
0.081	0.50605E+05
0.086	0.33438E+05
0.091	0.23961E+05
0.096	0.18131E+05
0.100	0.14268E+05
0.103	0.11564E+05
0.107	0.95909E+04
0.122	0.68915E+04
0.147	0.30280E+04
0.168	0.17078E+04
0.183	0.10453E+04
0.191	0.68032E+03
0.196	0.48871E+03
0.200	0.37529E+03
0.204	0.30606E+03
0.209	0.25907E+03
0.213	0.18909E+03
0.216	0.13427E+03
0.219	0.88370E+02
0.220	0.31543E+02
0.221	0.22501E+02
0.222	0.17160E+02
0.223	0.13230E+02
0.224	0.10326E+02
0.225	0.80878E+01
0.383	0.42269E+01

ALPHA = 1.38

B-44

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 22

0 MEASURED ;      . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSP))) = 0.28868E+01

SOIL HORIZON NUMBER 23 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.72 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.115	0.150E+05
0.141	0.600E+04
0.167	0.200E+04
0.196	0.100E+04
0.225	0.330E+03
0.244	0.100E+03
0.261	0.600E+02
0.287	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	14.2	0.142
2.00	15.7	0.015
3.00	16.7	0.010
4.00	17.6	0.009
5.00	18.3	0.008
6.00	19.1	0.007
7.00	19.7	0.007
8.00	20.3	0.006
9.00	20.9	0.006
10.00	21.5	0.006
20.00	25.5	0.044
30.00	28.5	0.037
40.00	32.2	0.029
50.00	34.4	0.020
60.00	35.9	0.013
70.00	37.4	0.009
80.00	38.7	0.008
90.00	39.3	0.007
100.00	39.8	0.007
200.00	45.3	0.070
300.00	50.3	0.070
400.00	52.0	0.060
500.00	53.0	0.070
600.00	54.0	0.070
700.00	54.4	0.070
800.00	55.3	0.060
900.00	55.7	0.040
1000.00	56.7	0.020
2000.00	100.0	0.038

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.028	0.20768E+06
0.057	0.86393E+05
0.060	0.49756E+05
0.063	0.32892E+05
0.066	0.23610E+05
0.068	0.17903E+05
0.070	0.14118E+05
0.072	0.11466E+05
0.074	0.95275E+04
0.083	0.68998E+04
0.097	0.29906E+04
0.109	0.16848E+04
0.118	0.10578E+04
0.123	0.71159E+03
0.127	0.44777E+03
0.130	0.33475E+03
0.133	0.22160E+03
0.136	0.16018E+03
0.140	0.90533E+02
0.146	0.51667E+02
0.200	0.51182E+02
0.250	0.30147E+02
0.300	0.20475E+02
0.350	0.14144E+02
0.400	0.91872E+01
0.450	0.51824E+01
0.500	0.28759E+01
0.550	0.48574E+01

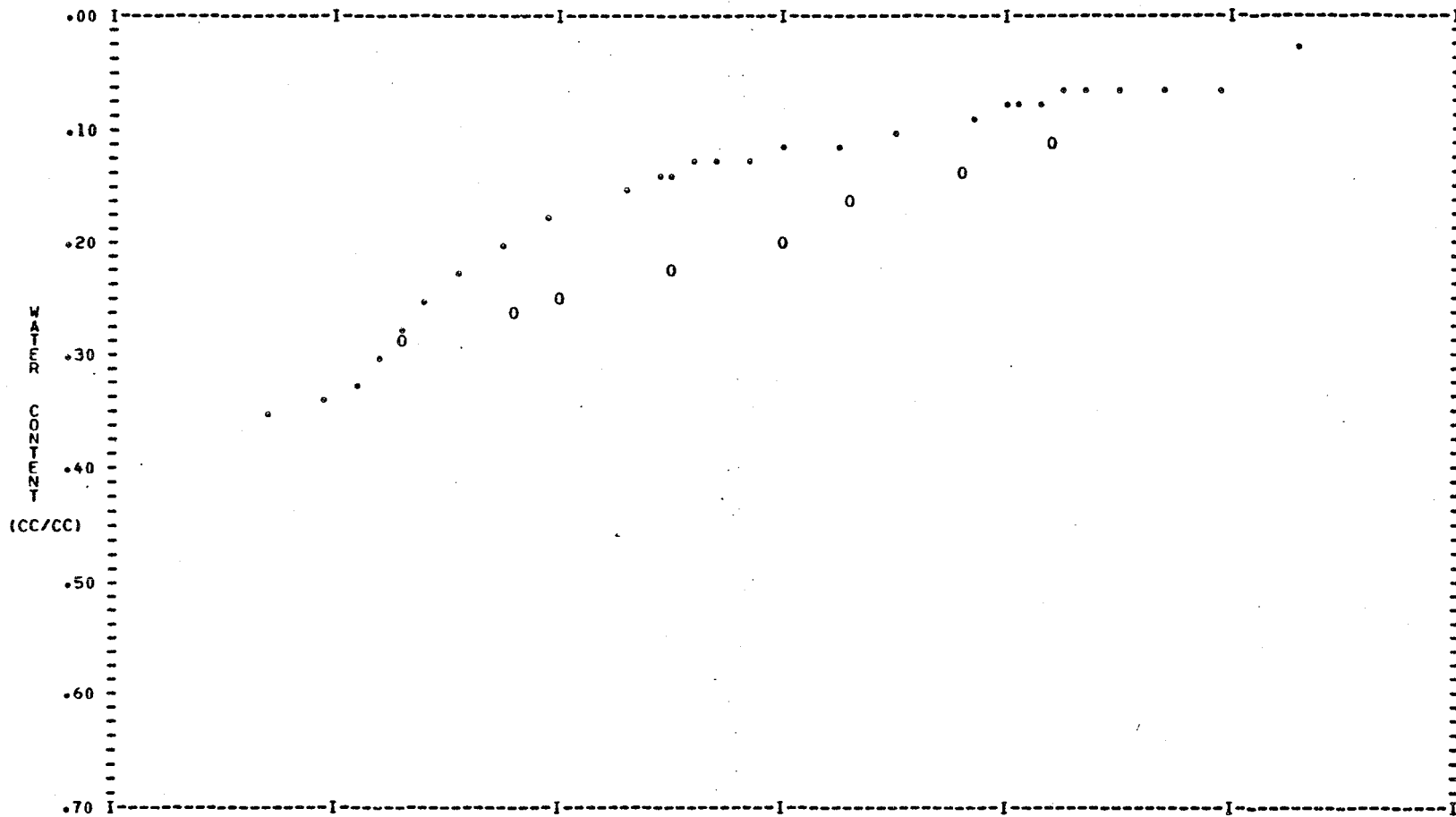
ALPHA = 1.38



1                      2                      3                      4                      5                      6

<sup>\*10</sup>                      <sup>\*10</sup>                      <sup>\*10</sup>                      <sup>\*10</sup>                      <sup>\*10</sup>                      <sup>\*10</sup>

11111122233445567781111122223344556778111112222334455677811111222233445567781111122223344556778  
0134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.67647E+01

B-47

SOIL HORIZON NUMBER 24 ( SEE TABLE 4 FOR IDENTIFICATION )

# DENSITY DATA:

BULK DENSITY = 1.75 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

# MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.121	0.150E+05
0.140	0.600E+04
0.175	0.200E+04
0.194	0.100E+04
0.217	0.330E+03
0.240	0.100E+03
0.248	0.600E+02
0.268	0.200E+02

# PARTICLE SIZE DISTRIBUTION DATA

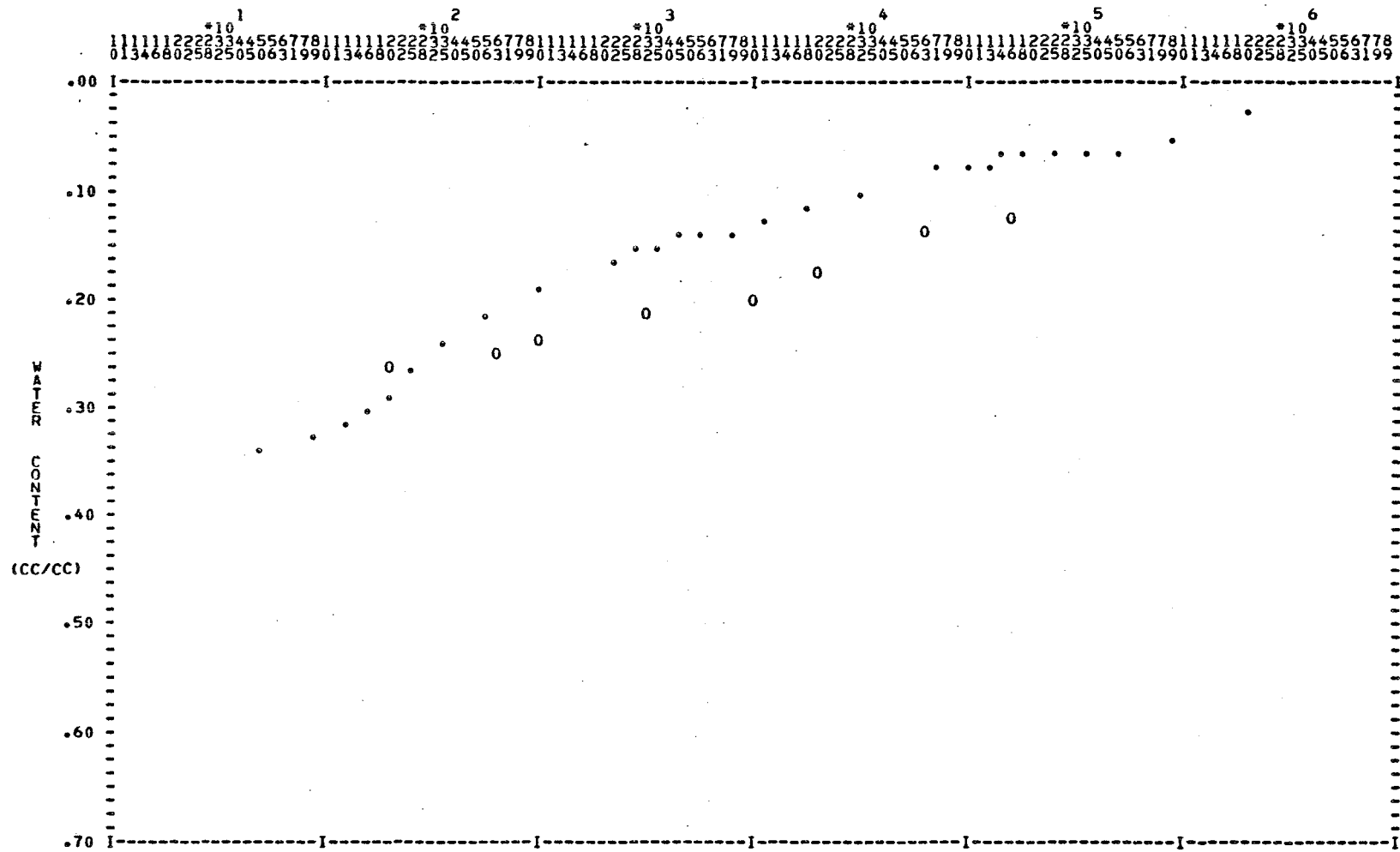
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	14.5	0.145
2.00	15.7	0.012
3.00	16.5	0.008
4.00	17.3	0.008
5.00	18.1	0.008
6.00	18.8	0.007
7.00	19.5	0.007
8.00	20.2	0.007
9.00	20.8	0.006
10.00	21.4	0.006
20.00	26.4	0.050
30.00	31.4	0.050
40.00	35.5	0.041
50.00	38.2	0.027
60.00	39.8	0.016
70.00	40.9	0.011
80.00	41.9	0.010
90.00	42.8	0.009
100.00	43.8	0.010
200.00	52.8	0.090
300.00	60.6	0.078
400.00	67.9	0.073
500.00	74.0	0.061
600.00	80.0	0.060
700.00	85.8	0.059
800.00	90.7	0.049
900.00	94.2	0.036
1000.00	96.5	0.023
2000.00	100.0	0.035

# PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.027	0.20454E+06
0.055	0.85949E+05
0.058	0.50240E+05
0.060	0.33527E+05
0.063	0.24226E+05
0.065	0.18462E+05
0.067	0.14616E+05
0.070	0.11908E+05
0.072	0.99208E+04
0.081	0.72462E+04
0.098	0.32442E+04
0.114	0.18476E+04
0.125	0.11475E+04
0.132	0.75933E+03
0.137	0.54680E+03
0.141	0.42329E+03
0.144	0.34545E+03
0.147	0.29204E+03
0.164	0.21785E+03
0.192	0.95146E+02
0.218	0.55449E+02
0.241	0.36060E+02
0.261	0.26218E+02
0.282	0.20098E+02
0.300	0.15493E+02
0.314	0.12008E+02
0.324	0.92371E+01
0.334	0.49034E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 24

0 MEASURED ;      . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.58571E+01

B-49

SOIL HORIZON NUMBER 25 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.58 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.082	0.150E+05
0.093	0.600E+04
0.112	0.200E+04
0.117	0.100E+04
0.137	0.330E+03
0.153	0.100E+03
0.163	0.600E+02
0.212	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

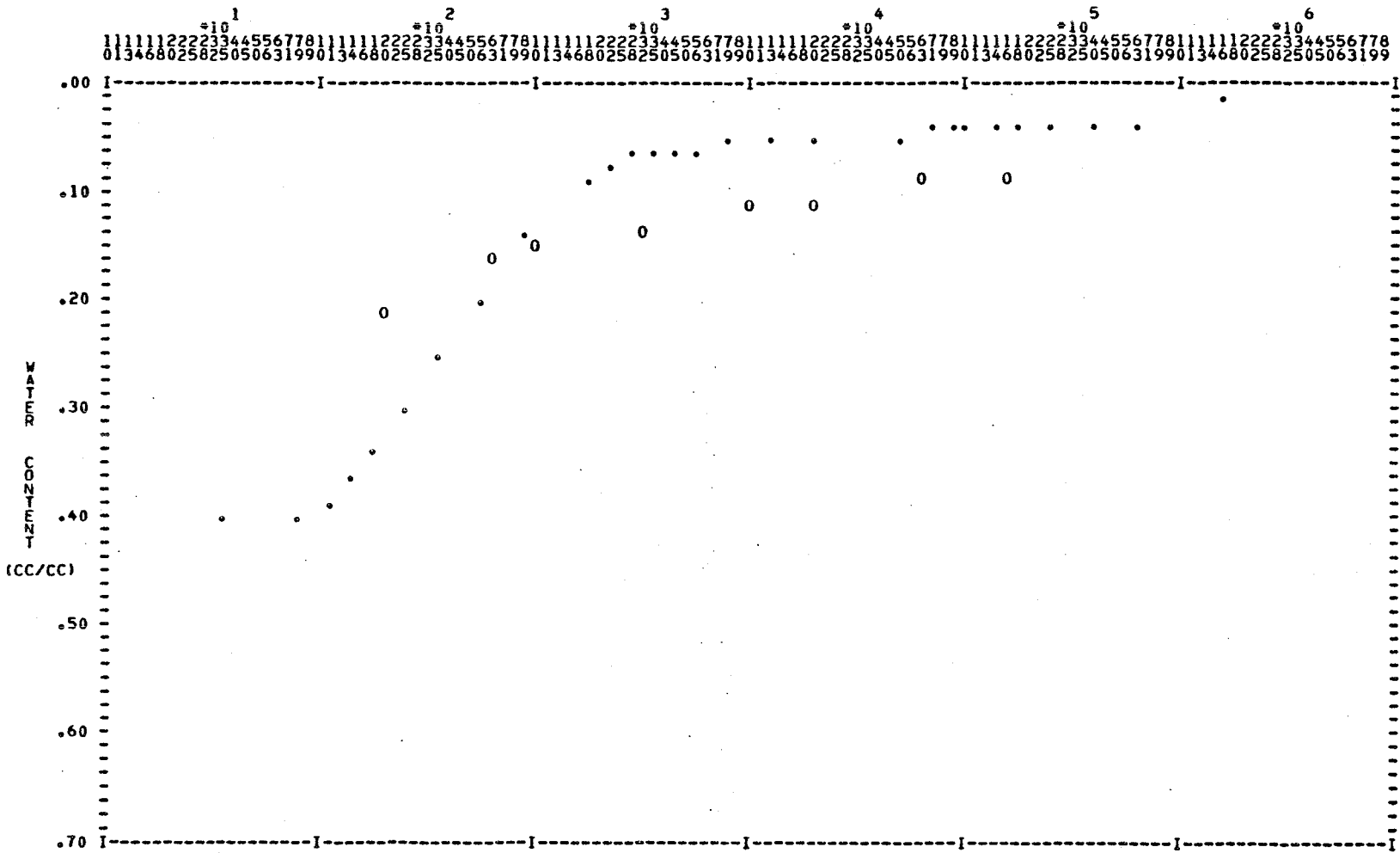
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	7.3	0.073
2.00	7.9	0.006
3.00	8.3	0.004
4.00	8.7	0.004
5.00	9.0	0.003
6.00	9.3	0.003
7.00	9.6	0.003
8.00	9.8	0.002
9.00	10.0	0.002
10.00	10.2	0.002
20.00	11.6	0.014
30.00	12.6	0.010
40.00	13.5	0.009
50.00	14.2	0.007
60.00	14.9	0.007
70.00	15.7	0.008
80.00	16.4	0.007
90.00	17.1	0.007
100.00	17.7	0.006
200.00	25.5	0.078
300.00	40.1	0.145
400.00	56.2	0.162
500.00	68.3	0.121
600.00	77.9	0.096
700.00	86.3	0.083
800.00	92.5	0.063
900.00	96.6	0.041
1000.00	98.6	0.020
2000.00	100.0	0.014

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.016	0.15838E+06
0.033	0.66023E+05
0.034	0.37887E+05
0.036	0.24868E+05
0.037	0.17720E+05
0.038	0.13344E+05
0.039	0.10456E+05
0.040	0.84425E+04
0.041	0.69777E+04
0.044	0.49476E+04
0.049	0.20991E+04
0.053	0.11974E+04
0.056	0.77256E+03
0.059	0.56547E+03
0.062	0.44245E+03
0.065	0.35114E+03
0.068	0.28370E+03
0.070	0.23294E+03
0.087	0.18500E+03
0.132	0.93293E+02
0.194	0.56144E+02
0.251	0.35797E+02
0.295	0.25019E+02
0.331	0.18731E+02
0.361	0.14177E+02
0.382	0.10732E+02
0.394	0.78568E+01
0.401	0.35903E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 25

0 MEASURED :      . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSP))) = 0.66988E+01

SOIL HORIZON NUMBER 26 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.60 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.064	0.150E+05
0.086	0.600E+04
0.122	0.200E+04
0.227	0.100E+04
0.243	0.330E+03
0.253	0.100E+03
0.272	0.600E+02
0.331	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

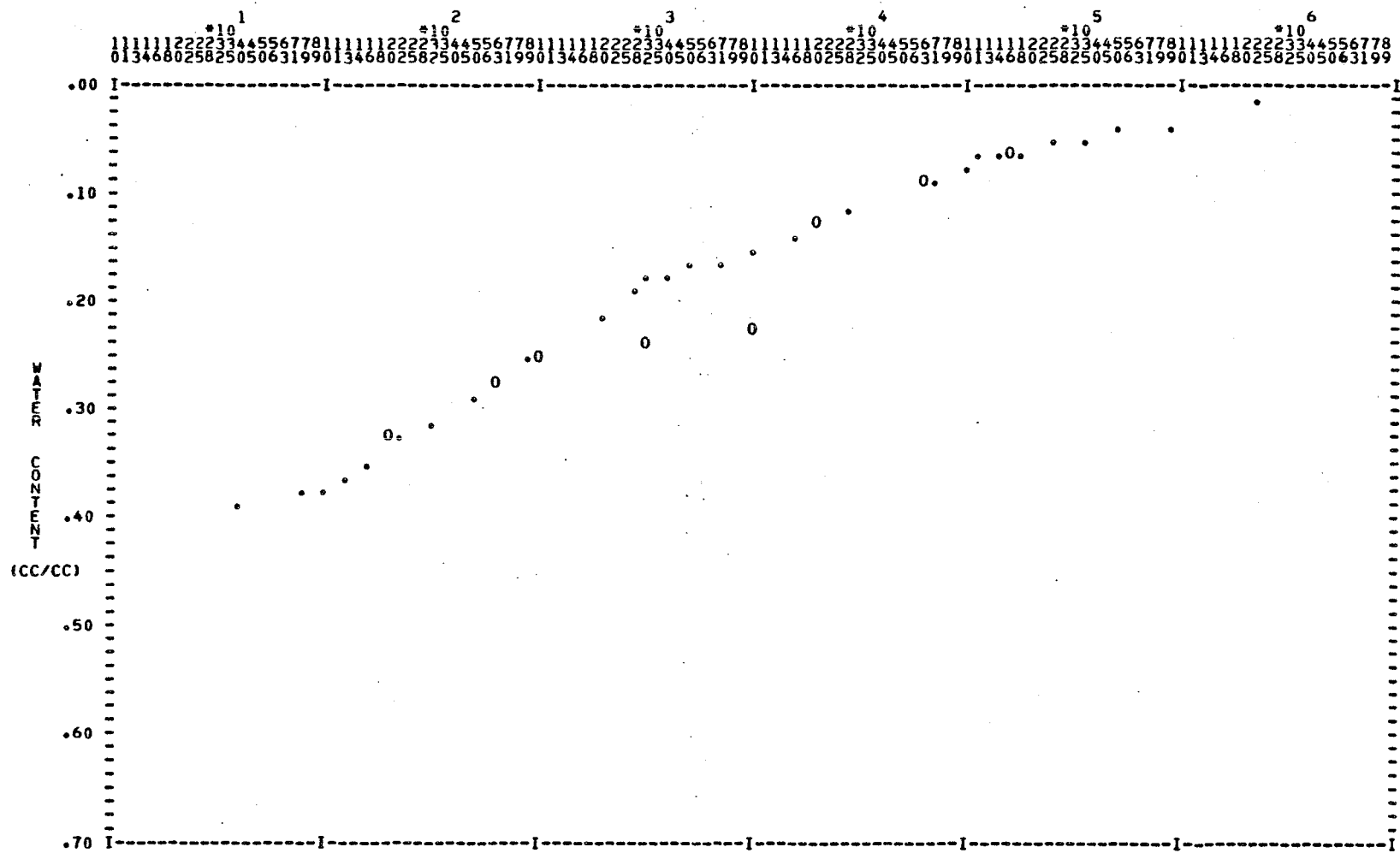
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	4.6	0.046
2.00	7.5	0.029
3.00	9.4	0.019
4.00	11.1	0.017
5.00	12.2	0.015
6.00	13.9	0.013
7.00	15.1	0.012
8.00	16.2	0.011
9.00	17.3	0.010
10.00	18.3	0.010
20.00	25.5	0.076
30.00	31.3	0.060
40.00	36.4	0.056
50.00	39.6	0.032
60.00	41.6	0.026
70.00	43.1	0.015
80.00	44.4	0.012
90.00	46.6	0.022
100.00	48.3	0.017
200.00	56.6	0.083
300.00	61.3	0.047
400.00	65.5	0.042
500.00	68.1	0.026
600.00	70.7	0.026
700.00	72.7	0.020
800.00	74.6	0.019
900.00	76.1	0.015
1000.00	77.1	0.010
2000.00	100.0	0.029

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.015	0.21487E+06
0.034	0.89144E+05
0.041	0.51082E+05
0.047	0.33636E+05
0.052	0.24089E+05
0.057	0.18250E+05
0.062	0.14324E+05
0.066	0.11631E+05
0.070	0.96333E+04
0.077	0.69377E+04
0.114	0.29777E+04
0.155	0.16702E+04
0.191	0.10488E+04
0.261	0.70310E+03
0.368	0.50741E+03
0.473	0.39344E+03
0.578	0.22164E+03
0.683	0.27179E+03
0.708	0.20122E+03
0.749	0.87322E+02
0.833	0.49600E+02
0.910	0.31722E+02
0.931	0.22193E+02
0.948	0.16497E+02
0.962	0.12629E+02
0.973	0.98744E+01
0.981	0.78241E+01
0.990	0.41884E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 26

0 MEASURED ;      0 PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.17515E+01

SOIL HORIZON NUMBER 27 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.66 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.045	0.150E+05
0.055	0.600E+04
0.076	0.200E+04
0.176	0.100E+04
0.186	0.330E+03
0.196	0.100E+03
0.209	0.600E+02
0.287	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	4.4	0.044
2.00	6.2	0.018
3.00	7.3	0.011
4.00	8.2	0.009
5.00	9.0	0.008
6.00	9.8	0.008
7.00	10.5	0.007
8.00	11.2	0.007
9.00	11.9	0.007
10.00	12.6	0.007
20.00	18.6	0.060
30.00	23.1	0.045
40.00	26.3	0.032
50.00	28.8	0.025
60.00	30.8	0.020
70.00	32.5	0.017
80.00	33.9	0.015
90.00	35.2	0.013
100.00	36.4	0.012
200.00	50.2	0.138
300.00	62.0	0.118
400.00	71.9	0.100
500.00	79.3	0.074
600.00	84.9	0.056
700.00	89.5	0.045
800.00	92.9	0.035
900.00	95.4	0.025
1000.00	97.0	0.016
2000.00	100.0	0.030

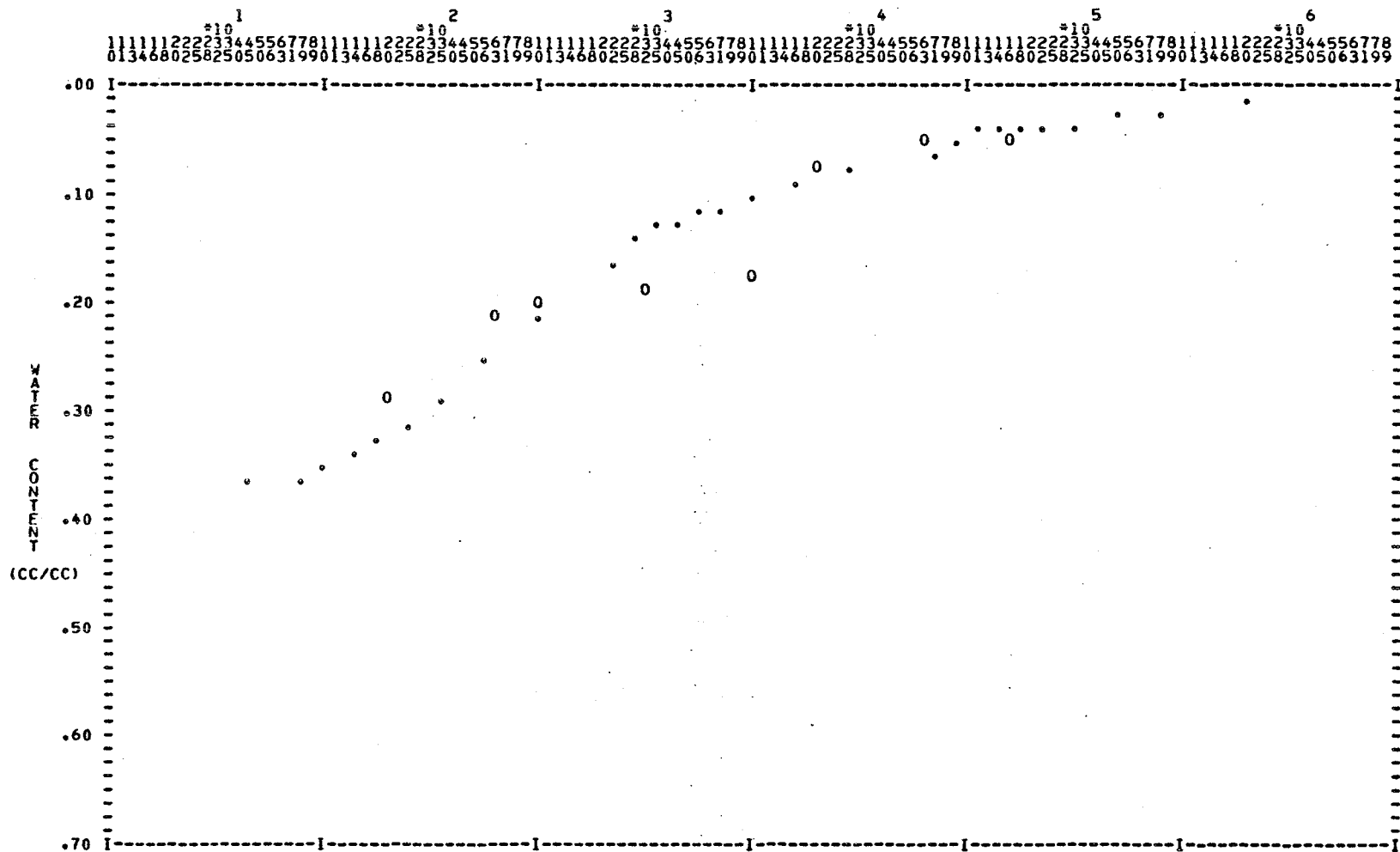
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.012	0.20593E+06
0.025	0.83939E+05
0.029	0.47587E+05
0.032	0.31507E+05
0.035	0.22754E+05
0.038	0.17375E+05
0.041	0.13795E+05
0.043	0.11273E+05
0.046	0.94210E+04
0.058	0.69686E+04
0.078	0.29561E+04
0.092	0.16357E+04
0.101	0.10494E+04
0.111	0.73524E+03
0.118	0.54706E+03
0.124	0.42523E+03
0.129	0.34148E+03
0.134	0.28121E+03
0.162	0.21944E+03
0.200	0.95285E+02
0.250	0.59457E+02
0.300	0.34722E+02
0.350	0.24076E+02
0.400	0.17787E+02
0.450	0.13490E+02
0.500	0.10396E+02
0.550	0.80358E+01
0.600	0.44220E+01

ALPHA = 1.38



SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



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SOIL HORIZON NUMBER 27

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSP))) = 0.20976E+01

SOIL HORIZON NUMBER 28 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.62 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.049	0.150E+05
0.058	0.600E+04
0.076	0.200E+04
0.156	0.100E+04
0.170	0.330E+03
0.180	0.100E+03
0.237	0.600E+02
0.271	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	5.6	0.056
2.00	7.3	0.017
3.00	8.4	0.011
4.00	9.3	0.009
5.00	10.2	0.008
6.00	10.9	0.008
7.00	11.7	0.007
8.00	12.4	0.007
9.00	13.1	0.007
10.00	13.7	0.006
20.00	19.2	0.055
30.00	23.4	0.042
40.00	26.6	0.032
50.00	29.1	0.025
60.00	31.2	0.021
70.00	33.0	0.018
80.00	34.6	0.016
90.00	36.1	0.015
100.00	37.5	0.014
200.00	52.1	0.146
300.00	63.9	0.118
400.00	73.8	0.099
500.00	81.1	0.073
600.00	86.6	0.055
700.00	91.0	0.044
800.00	94.3	0.033
900.00	96.5	0.022
1000.00	97.8	0.013
2000.00	100.0	0.022

PREDICTED MOISTURE CHARACTERISTIC DATA

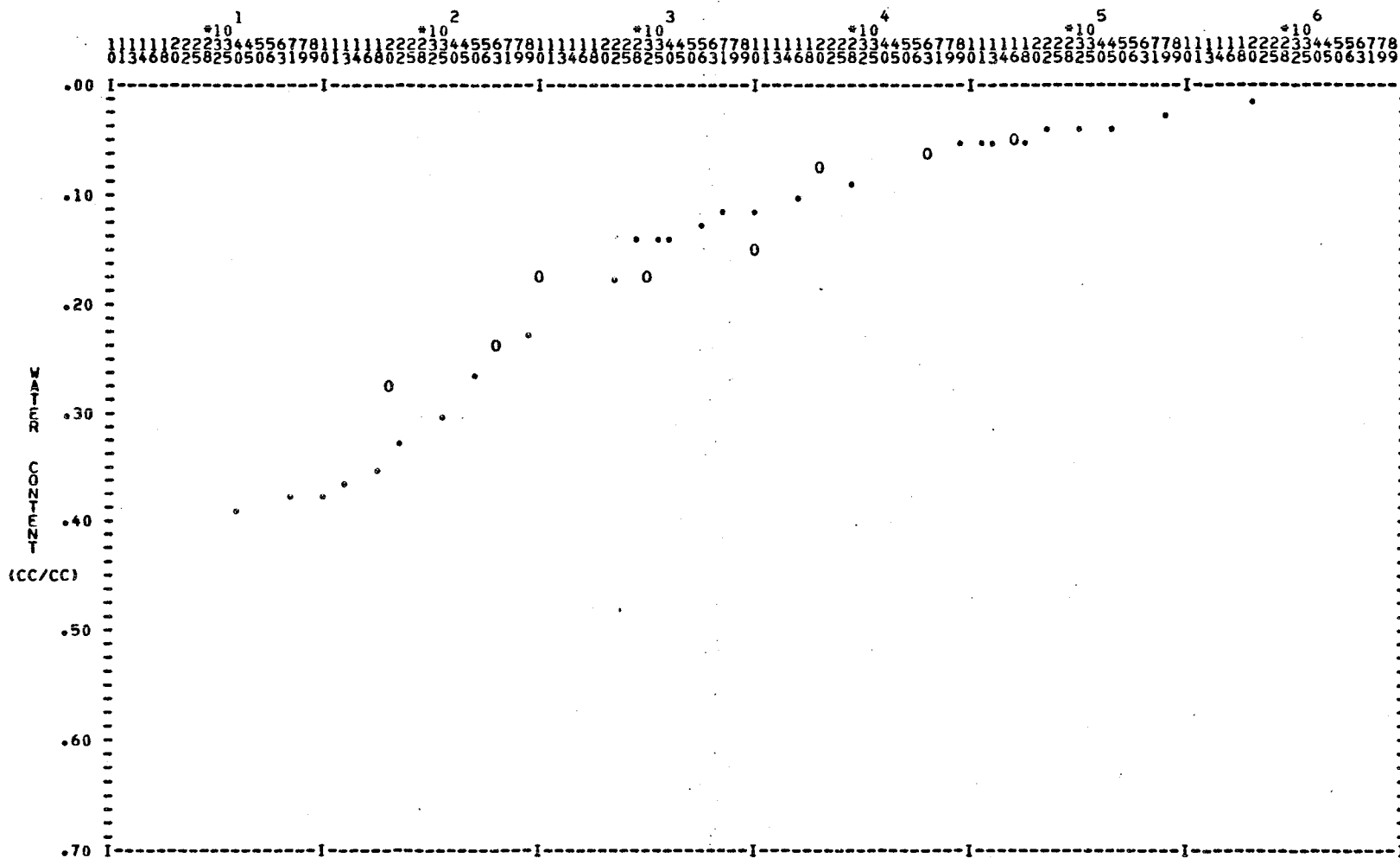
SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.014	0.19750E+06
0.030	0.81285E+05
0.034	0.46450E+05
0.038	0.30733E+05
0.041	0.22129E+05
0.044	0.16840E+05
0.047	0.13327E+05
0.049	0.10850E+05
0.052	0.90510E+04
0.064	0.66320E+04
0.083	0.28244E+04
0.097	0.15818E+04
0.108	0.10180E+04
0.117	0.71724E+03
0.125	0.53777E+03
0.131	0.42075E+03
0.137	0.33981E+03
0.143	0.28124E+03
0.174	0.21504E+03
0.226	0.92562E+02
0.268	0.52775E+02
0.301	0.33548E+02
0.326	0.23236E+02
0.345	0.17123E+02
0.360	0.12921E+02
0.371	0.98639E+01
0.378	0.74769E+01
0.384	0.40376E+01

ALPHA = 1.38

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SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 29 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.65 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.053	0.150E+05
0.063	0.600E+04
0.078	0.200E+04
0.130	0.100E+04
0.142	0.330E+03
0.150	0.100E+03
0.218	0.600E+02
0.251	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

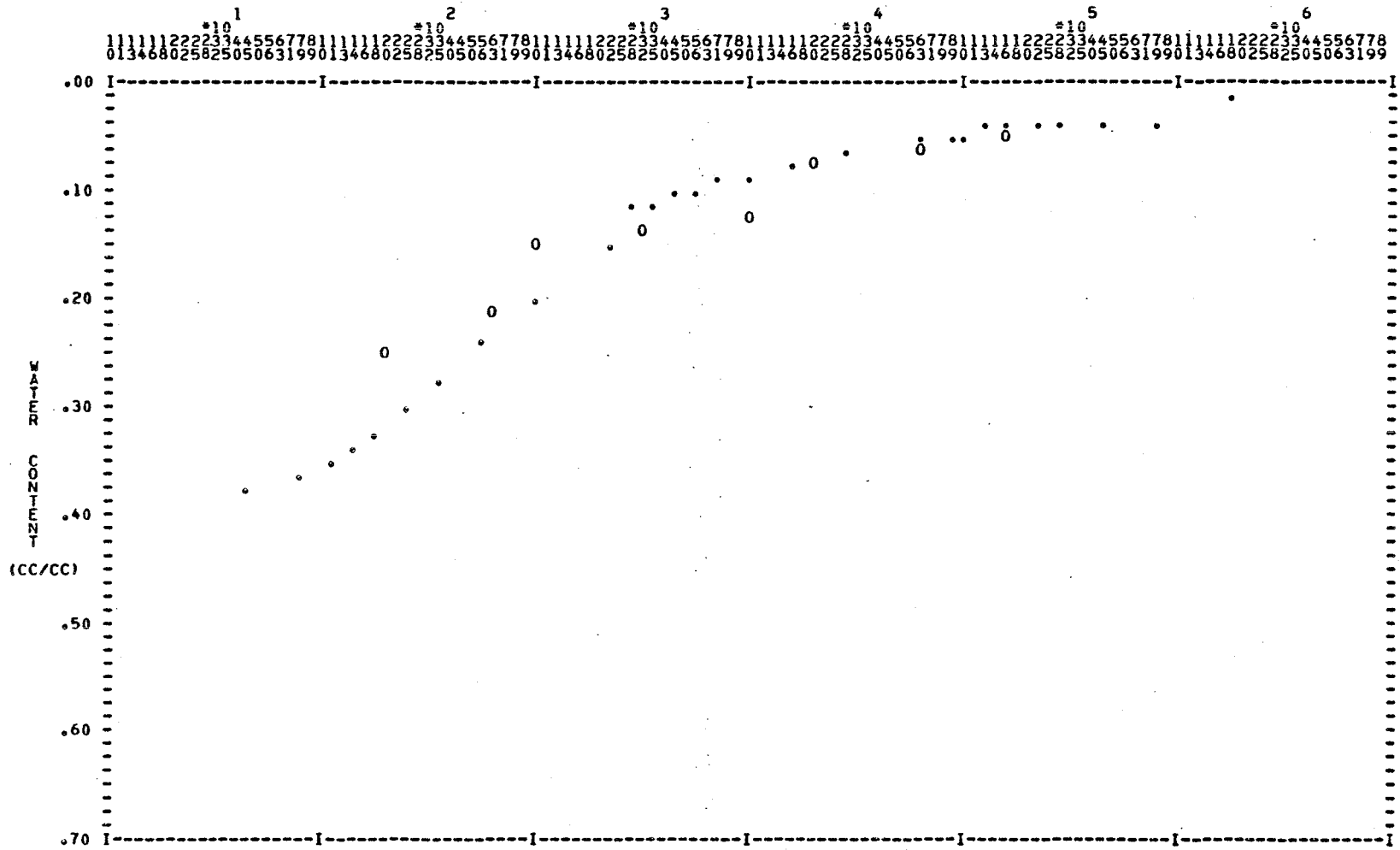
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	7.2	0.072
2.00	8.8	0.010
3.00	8.8	0.007
4.00	9.0	0.007
5.00	9.0	0.006
6.00	9.0	0.006
7.00	9.0	0.005
8.00	9.0	0.005
9.00	9.0	0.005
10.00	9.0	0.005
20.00	9.0	0.003
30.00	9.0	0.003
40.00	9.0	0.002
50.00	9.0	0.019
60.00	9.0	0.017
70.00	9.0	0.016
80.00	9.0	0.016
90.00	9.0	0.015
100.00	9.0	0.015
200.00	9.0	0.151
300.00	9.0	0.127
400.00	9.0	0.103
500.00	9.0	0.077
600.00	9.0	0.061
700.00	9.0	0.051
800.00	9.0	0.039
900.00	9.0	0.029
1000.00	9.0	0.020
2000.00	100.0	0.032

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.015	0.18368E+06
0.033	0.77108E+06
0.035	0.44774E+06
0.037	0.29661E+06
0.040	0.21246E+06
0.042	0.16171E+06
0.044	0.12711E+06
0.045	0.10319E+06
0.047	0.85666E+05
0.054	0.61769E+05
0.066	0.26726E+05
0.075	0.15340E+05
0.084	0.99372E+04
0.090	0.70718E+04
0.097	0.53982E+04
0.103	0.42808E+04
0.109	0.34932E+04
0.114	0.29146E+04
0.145	0.22149E+04
0.198	0.96091E+03
0.241	0.54482E+03
0.275	0.34777E+03
0.301	0.24286E+03
0.323	0.18014E+03
0.340	0.13717E+03
0.352	0.10625E+03
0.362	0.82825E+02
0.371	0.44407E+02

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 30 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.82 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.035	0.150E+05
0.040	0.600E+04
0.045	0.200E+04
0.089	0.100E+04
0.096	0.330E+03
0.106	0.100E+03
0.133	0.600E+02
0.213	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	4.2	0.042
2.00	4.5	0.003
3.00	4.8	0.003
4.00	5.1	0.003
5.00	5.4	0.003
6.00	5.7	0.003
7.00	6.0	0.003
8.00	6.2	0.003
9.00	6.5	0.002
10.00	6.7	0.002
20.00	8.3	0.016
30.00	10.0	0.017
40.00	12.3	0.023
50.00	15.0	0.027
60.00	17.7	0.027
70.00	20.3	0.026
80.00	22.7	0.024
90.00	24.3	0.021
100.00	26.7	0.019
200.00	39.1	0.124
300.00	49.6	0.105
400.00	58.3	0.087
500.00	65.1	0.068
600.00	70.6	0.055
700.00	75.4	0.047
800.00	79.5	0.041
900.00	83.1	0.036
1000.00	86.3	0.032
2000.00	100.0	0.137

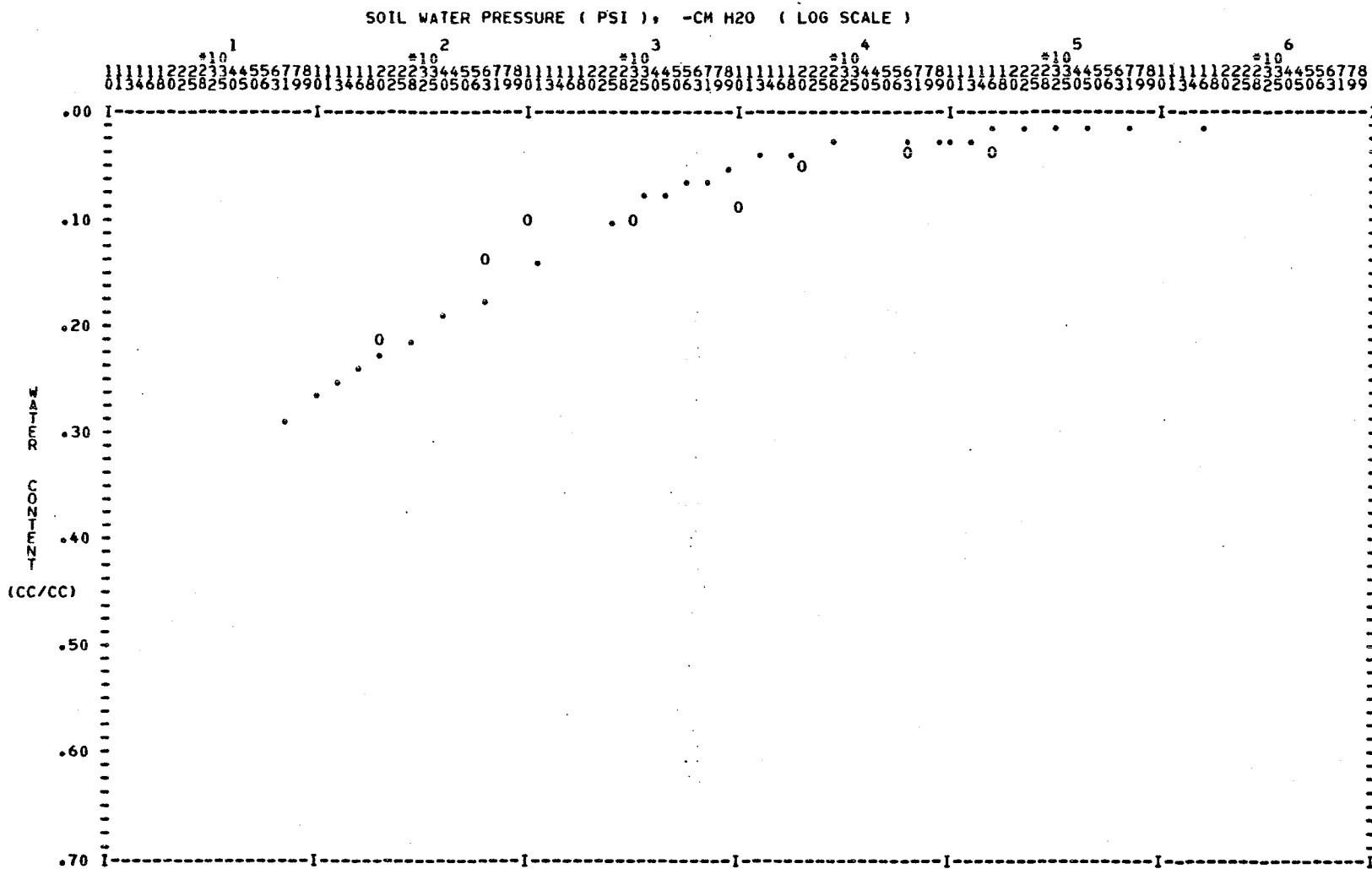
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.007	0.16374E+06
0.015	0.73713E+05
0.015	0.44894E+05
0.016	0.30131E+05
0.017	0.21722E+05
0.018	0.16474E+05
0.019	0.12970E+05
0.020	0.10506E+05
0.021	0.87036E+04
0.023	0.62002E+04
0.026	0.28085E+04
0.035	0.17594E+04
0.043	0.12170E+04
0.051	0.89227E+03
0.060	0.67820E+03
0.067	0.53325E+03
0.074	0.44829E+03
0.081	0.38613E+03
0.103	0.24613E+03
0.139	0.10699E+03
0.169	0.60017E+02
0.199	0.33711E+02
0.229	0.22746E+02
0.259	0.15340E+02
0.289	0.10483E+02
0.292	0.67484E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 31 ( SEE TABLE 4 FOR IDENTIFICATION )

# DENSITY DATA:

BULK DENSITY = 1.71 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

## MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.029	0.150E+05
0.034	0.600E+04
0.036	0.200E+04
0.046	0.100E+04
0.053	0.330E+03
0.067	0.100E+03
0.101	0.600E+02
0.120	0.200E+02

## PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	4.1	0.041
2.00	4.8	0.004
4.00	5.1	0.003
5.00	5.3	0.002
6.00	5.6	0.003
7.00	5.9	0.002
8.00	6.0	0.001
9.00	6.1	0.001
10.00	6.8	0.007
20.00	7.0	0.002
30.00	7.0	0.001
40.00	7.1	0.001
50.00	7.3	0.002
60.00	7.5	0.002
70.00	7.8	0.003
80.00	8.0	0.003
90.00	8.3	0.003
100.00	17.5	0.092
200.00	33.2	0.157
300.00	49.0	0.157
400.00	60.5	0.115
500.00	68.9	0.084
600.00	75.9	0.069
700.00	81.5	0.056
800.00	86.0	0.045
900.00	89.6	0.036
1000.00	100.0	0.104
2000.00		

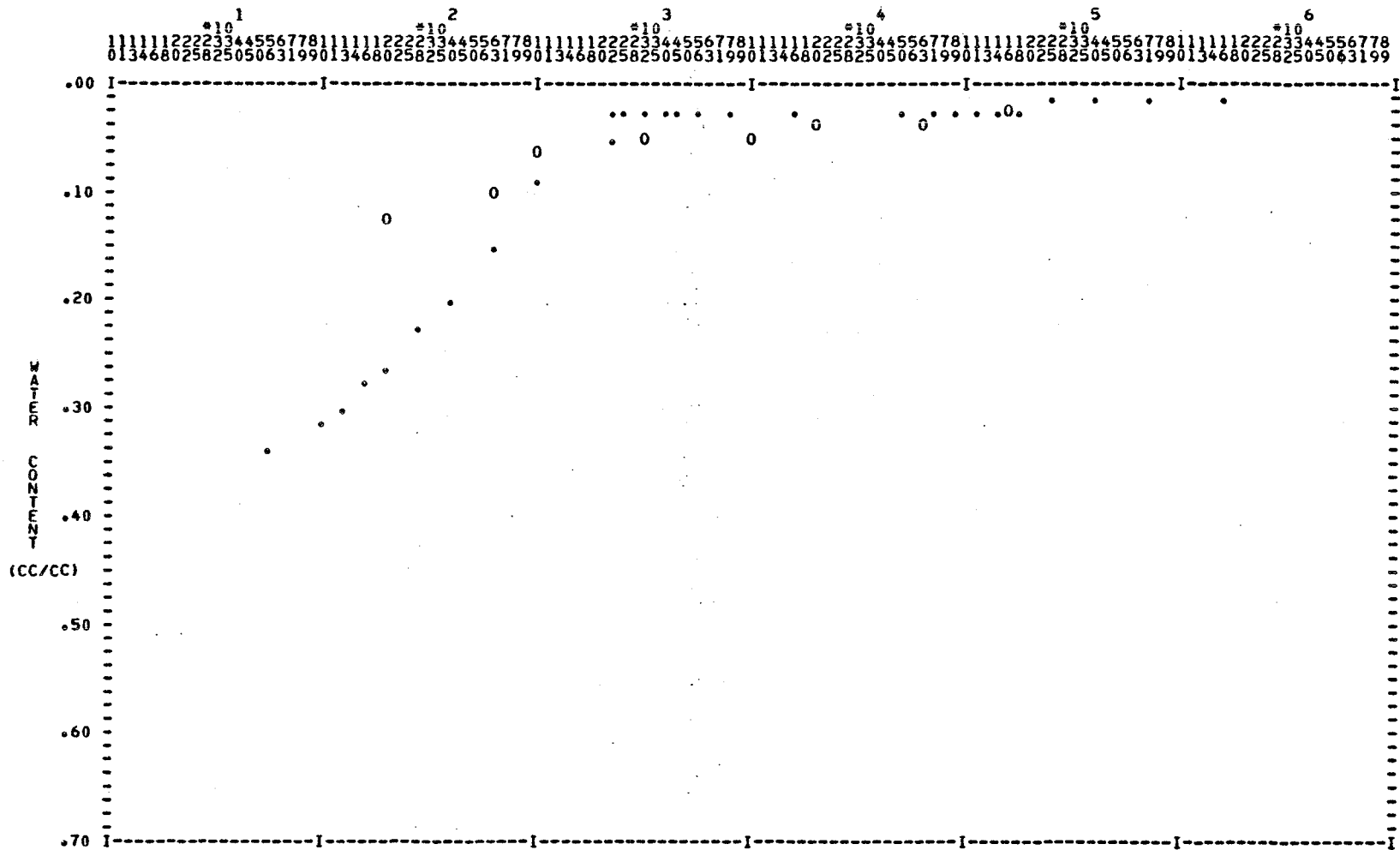
## PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.008	0.16221E+06
0.017	0.68888E+05
0.018	0.39965E+05
0.019	0.26170E+05
0.019	0.18531E+05
0.020	0.13847E+05
0.021	0.10758E+05
0.021	0.86090E+04
0.023	0.70501E+04
0.024	0.47643E+04
0.024	0.16654E+04
0.025	0.79708E+03
0.025	0.54521E+03
0.026	0.47297E+03
0.026	0.39607E+03
0.027	0.32229E+03
0.028	0.26401E+03
0.029	0.21880E+03
0.046	0.21178E+03
0.090	0.10514E+03
0.146	0.61991E+02
0.194	0.39378E+02
0.230	0.27085E+02
0.257	0.20075E+02
0.279	0.15412E+02
0.297	0.12145E+02
0.311	0.97575E+01
0.336	0.58331E+01

ALPHA = 1.38



SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 32 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.56 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.044	0.150E+05
0.047	0.600E+04
0.053	0.200E+04
0.246	0.100E+04
0.270	0.330E+03
0.295	0.100E+03
0.310	0.600E+02
0.340	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

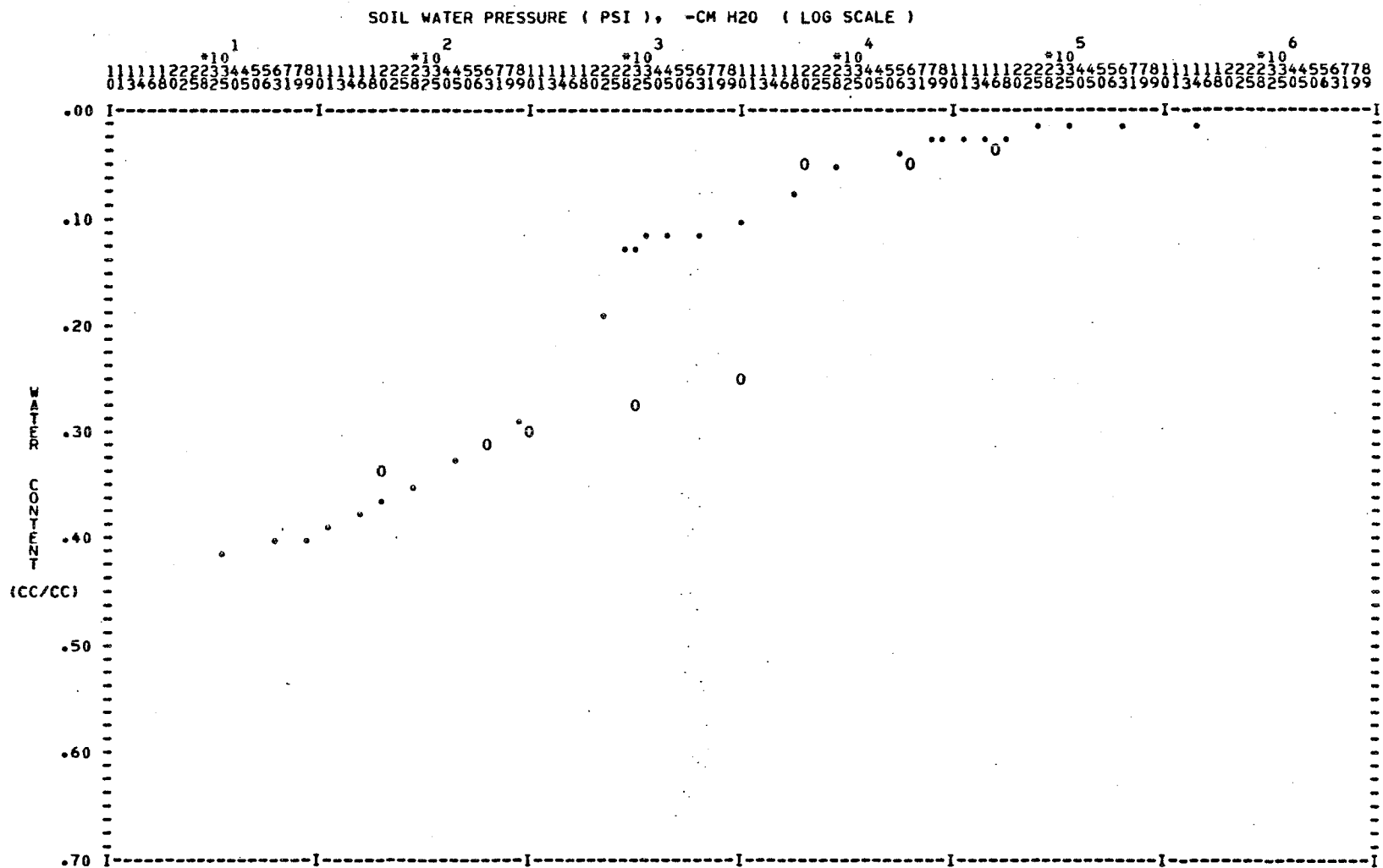
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	3.0	0.030
2.00	3.4	0.004
3.00	3.7	0.003
4.00	4.1	0.004
5.00	4.5	0.004
6.00	4.9	0.004
7.00	5.3	0.004
8.00	5.7	0.004
9.00	6.2	0.004
10.00	6.6	0.004
20.00	10.1	0.035
30.00	16.0	0.059
40.00	21.9	0.059
50.00	27.5	0.056
60.00	33.0	0.055
70.00	38.5	0.055
80.00	43.9	0.054
90.00	49.1	0.052
100.00	54.1	0.050
200.00	72.0	0.179
300.00	88.0	0.160
400.00	93.0	0.050
500.00	97.0	0.040
600.00	98.0	0.010
700.00	99.0	0.010
800.00	99.5	0.005
900.00	99.8	0.003
1000.00	99.9	0.001
2000.00	100.0	0.000

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.007	0.13935E+06
0.015	0.61138E+05
0.016	0.37433E+05
0.018	0.25557E+05
0.019	0.18723E+05
0.021	0.14406E+05
0.023	0.11484E+05
0.024	0.94064E+04
0.026	0.78703E+04
0.034	0.58223E+04
0.054	0.28714E+04
0.078	0.16933E+04
0.098	0.10558E+04
0.110	0.66089E+03
0.115	0.42506E+03
0.117	0.30000E+03
0.126	0.20786E+03
0.153	0.13360E+03
0.183	0.80055E+02
0.235	0.47194E+02
0.350	0.22940E+02
0.566	0.12034E+02
0.770	0.11502E+02
0.990	0.11135E+02
0.997	0.86681E+01
0.999	0.66604E+01
0.999	0.37458E+01

ALPHA = 1.38

B-65



SOIL HORIZON NUMBER 33 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.58 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.036	0.150E+05
0.049	0.600E+04
0.070	0.200E+04
0.128	0.100E+04
0.144	0.330E+03
0.153	0.100E+03
0.188	0.600E+02
0.278	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	4.7	0.047
2.00	6.3	0.016
3.00	7.3	0.010
4.00	8.2	0.009
5.00	9.0	0.008
6.00	9.8	0.008
7.00	10.5	0.007
8.00	11.2	0.007
9.00	11.8	0.006
10.00	12.4	0.006
20.00	17.4	0.050
30.00	21.3	0.039
40.00	24.4	0.031
50.00	26.7	0.023
60.00	28.2	0.015
70.00	29.3	0.011
80.00	30.3	0.010
90.00	31.3	0.010
100.00	32.4	0.011
200.00	62.3	0.299
300.00	76.7	0.144
400.00	84.2	0.075
500.00	89.0	0.048
600.00	92.5	0.035
700.00	95.2	0.027
800.00	97.1	0.019
900.00	98.3	0.012
1000.00	98.9	0.006
2000.00	100.0	0.011

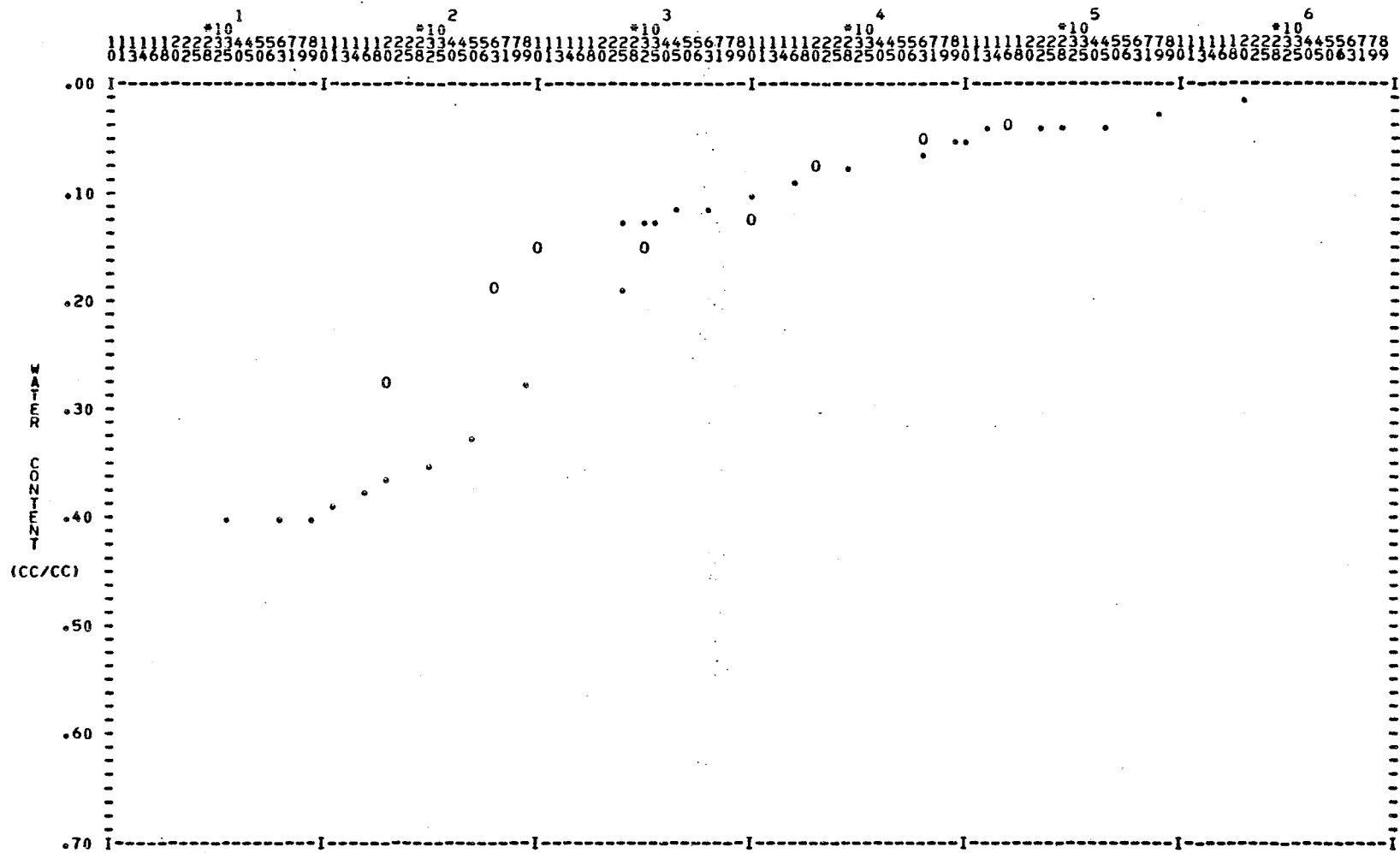
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.013	0.18859E+06
0.028	0.77986E+05
0.031	0.44728E+05
0.035	0.29587E+05
0.038	0.21277E+05
0.041	0.16168E+05
0.044	0.12776E+05
0.046	0.10396E+05
0.049	0.86541E+04
0.060	0.63112E+04
0.078	0.27064E+04
0.092	0.15200E+04
0.103	0.97010E+03
0.111	0.65643E+03
0.116	0.47216E+03
0.120	0.36912E+03
0.124	0.30541E+03
0.129	0.26129E+03
0.191	0.23862E+03
0.281	0.93119E+02
0.325	0.48546E+02
0.350	0.30049E+02
0.366	0.20605E+02
0.379	0.15114E+02
0.388	0.11322E+02
0.394	0.85296E+01
0.398	0.62592E+01
0.402	0.34295E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 33

0 MEASURED 8

• PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.30616E+01

SOIL HORIZON NUMBER 34 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.48 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.078	0.150E+05
0.090	0.600E+04
0.115	0.200E+04
0.197	0.100E+04
0.210	0.330E+03
0.226	0.100E+03
0.234	0.600E+02
0.284	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	12.5	0.125
2.00	14.3	0.018
3.00	15.5	0.012
4.00	16.6	0.011
5.00	17.6	0.010
6.00	18.5	0.009
7.00	19.3	0.008
8.00	20.0	0.008
9.00	20.7	0.007
10.00	21.4	0.007
20.00	26.6	0.052
30.00	30.9	0.042
40.00	34.2	0.034
50.00	36.7	0.025
60.00	38.0	0.013
70.00	38.7	0.007
80.00	39.4	0.007
90.00	40.3	0.009
100.00	41.6	0.013
200.00	65.6	0.240
300.00	78.0	0.124
400.00	85.1	0.071
500.00	89.8	0.047
600.00	93.1	0.033
700.00	95.6	0.025
800.00	97.3	0.017
900.00	98.4	0.011
1000.00	98.9	0.005
2000.00	100.0	0.011

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.032	0.17879E+06
0.066	0.74470E+05
0.071	0.42898E+05
0.075	0.28328E+05
0.080	0.20307E+05
0.083	0.15379E+05
0.087	0.12114E+05
0.090	0.98274E+04
0.093	0.81581E+04
0.106	0.58862E+04
0.127	0.25379E+04
0.144	0.14353E+04
0.157	0.91074E+03
0.165	0.59231E+03
0.170	0.40150E+03
0.173	0.31893E+03
0.176	0.27797E+03
0.181	0.24816E+03
0.237	0.21192E+03
0.317	0.83787E+02
0.360	0.44425E+02
0.386	0.27659E+02
0.404	0.18906E+02
0.417	0.13745E+02
0.426	0.10250E+02
0.432	0.77126E+01
0.435	0.56877E+01
0.439	0.31742E+01

ALPHA = 1.38



SOIL HORIZON NUMBER 35 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.52 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.065	0.150E+05
0.071	0.600E+04
0.081	0.200E+04
0.117	0.100E+04
0.138	0.330E+03
0.157	0.100E+03
0.172	0.600E+02
0.298	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	10.3	0.103
2.00	11.0	0.007
3.00	11.4	0.004
4.00	11.8	0.004
5.00	12.1	0.003
6.00	12.5	0.003
7.00	12.8	0.003
8.00	13.2	0.003
9.00	13.5	0.003
10.00	13.8	0.003
20.00	17.1	0.033
30.00	19.8	0.027
40.00	21.8	0.020
50.00	23.4	0.016
60.00	24.9	0.011
70.00	25.4	0.009
80.00	26.2	0.008
90.00	27.0	0.008
100.00	27.8	0.008
200.00	55.2	0.274
300.00	70.9	0.157
400.00	80.1	0.093
500.00	86.4	0.063
600.00	90.7	0.043
700.00	93.8	0.031
800.00	95.9	0.021
900.00	97.2	0.014
1000.00	98.0	0.008
2000.00	100.0	0.020

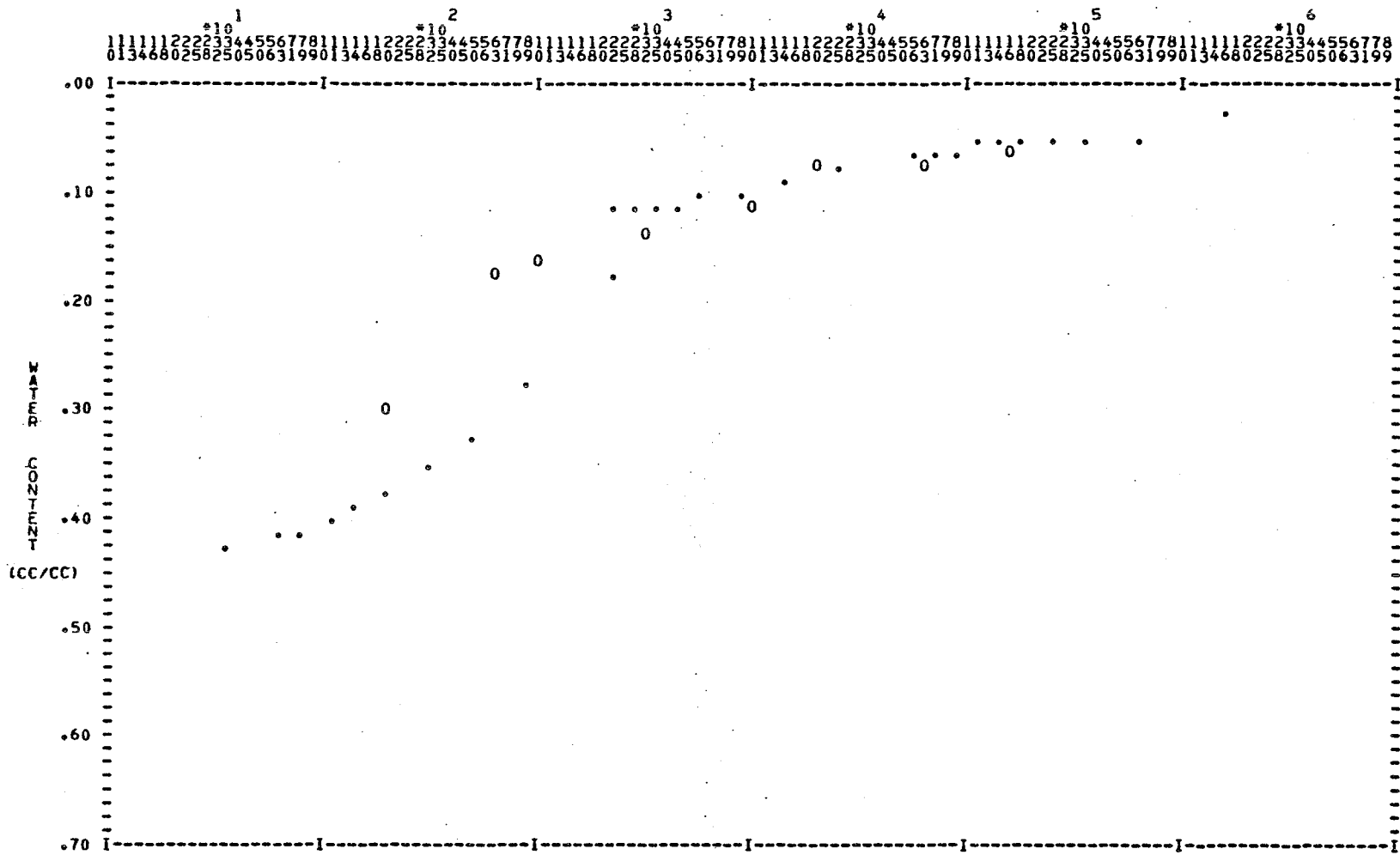
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.023	0.15484E+06
0.048	0.62815E+05
0.049	0.35790E+05
0.051	0.23970E+05
0.052	0.17490E+05
0.054	0.13465E+05
0.055	0.10759E+05
0.057	0.88381E+04
0.058	0.74166E+04
0.066	0.55545E+04
0.079	0.24037E+04
0.089	0.13434E+04
0.096	0.86003E+03
0.102	0.59130E+03
0.107	0.43345E+03
0.110	0.33936E+03
0.113	0.27802E+03
0.117	0.23479E+03
0.177	0.22401E+03
0.269	0.90348E+02
0.322	0.48125E+02
0.355	0.30160E+02
0.378	0.20523E+02
0.393	0.14772E+02
0.404	0.10981E+02
0.412	0.83015E+01
0.416	0.62615E+01
0.422	0.36670E+01

ALPHA = 1.38



SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 35

0 MEASURED &amp; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.28656E+01

SOIL HORIZON NUMBER 36 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.55 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.025	0.150E+05
0.025	0.600E+04
0.031	0.200E+04
0.054	0.100E+04
0.068	0.330E+03
0.082	0.100E+03
0.121	0.600E+02
0.232	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	3.7	0.037
2.00	3.8	0.001
3.00	3.9	0.001
4.00	4.0	0.001
5.00	4.1	0.001
6.00	4.2	0.001
7.00	4.3	0.001
8.00	4.4	0.001
9.00	4.5	0.001
10.00	4.6	0.001
20.00	5.2	0.006
30.00	6.1	0.009
40.00	7.0	0.007
50.00	8.1	0.004
60.00	8.4	0.004
80.00	10.1	0.010
100.00	11.5	0.014
200.00	43.3	0.318
300.00	61.6	0.183
400.00	72.8	0.113
500.00	81.0	0.082
600.00	81.2	0.062
700.00	91.0	0.046
800.00	95.1	0.032
900.00	97.1	0.021
1000.00	98.2	0.011
2000.00	100.0	0.018

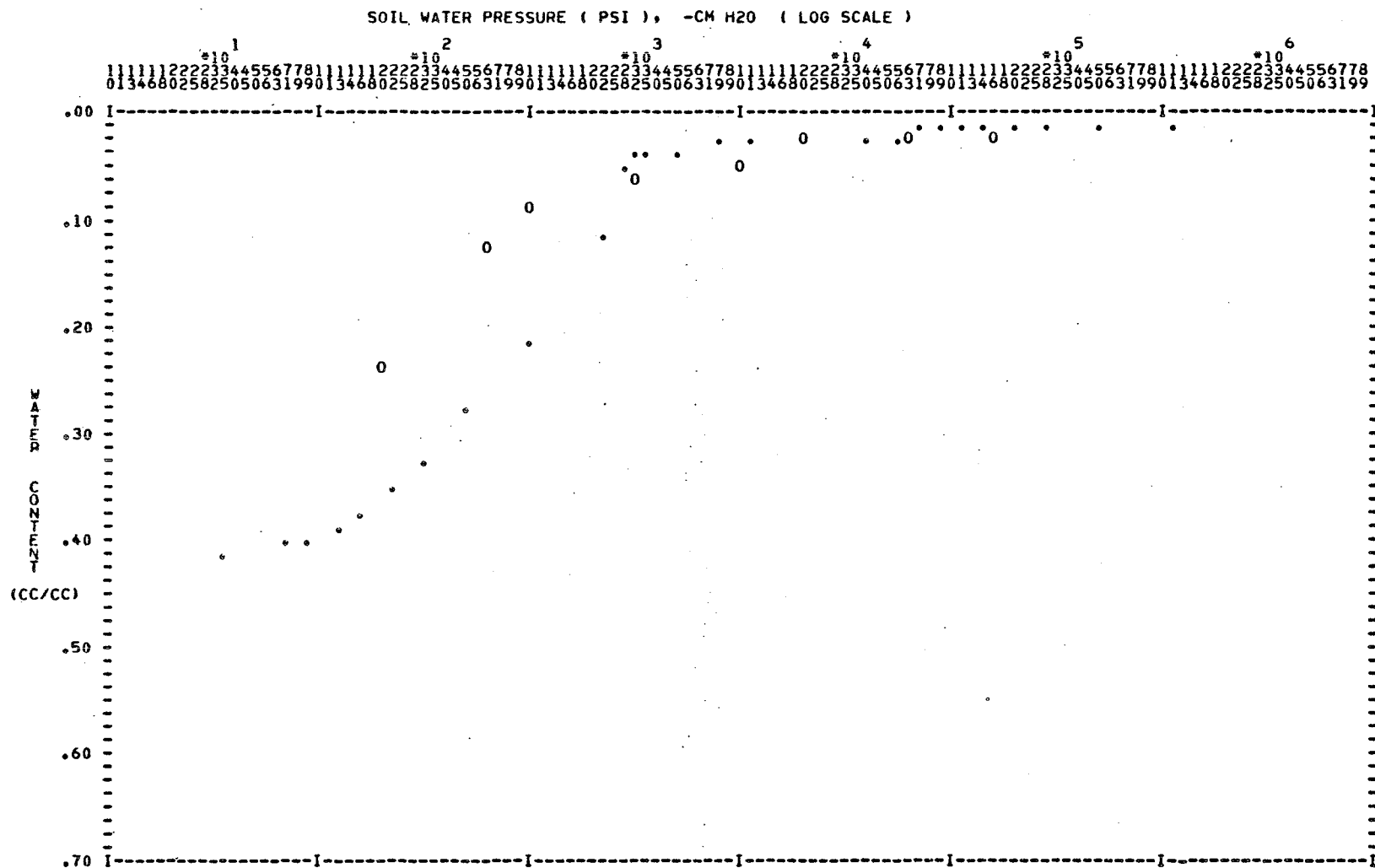
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.008	0.10915E+06
0.016	0.4859E+05
0.016	0.2943E+05
0.017	0.1980E+05
0.017	0.1430E+05
0.018	0.1089E+05
0.018	0.8570E+04
0.019	0.6954E+04
0.019	0.5771E+04
0.020	0.4141E+04
0.023	0.1984E+04
0.027	0.1184E+04
0.031	0.7558E+03
0.033	0.4878E+03
0.034	0.3733E+03
0.036	0.3335E+03
0.040	0.2992E+03
0.045	0.2679E+03
0.114	0.2358E+03
0.218	0.9519E+02
0.279	0.5120E+02
0.319	0.3249E+02
0.349	0.2248E+02
0.372	0.1636E+02
0.388	0.1221E+02
0.399	0.9208E+01
0.405	0.6812E+01
0.411	0.3678E+01

ALPHA = 1.38

B-73



SOIL HORIZON NUMBER 37 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.70 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.049	0.150E+05
0.070	0.600E+04
0.107	0.200E+04
0.151	0.100E+04
0.172	0.330E+03
0.194	0.100E+03
0.221	0.600E+02
0.279	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	3.8	0.038
2.00	6.5	0.027
3.00	8.3	0.018
4.00	9.7	0.014
5.00	10.8	0.012
6.00	11.9	0.010
7.00	12.8	0.009
8.00	13.6	0.008
9.00	14.3	0.007
10.00	15.0	0.007
20.00	19.7	0.047
30.00	23.0	0.033
40.00	25.5	0.025
50.00	27.3	0.018
60.00	28.3	0.010
70.00	28.8	0.005
80.00	29.2	0.004
90.00	29.6	0.004
100.00	30.1	0.005
200.00	38.4	0.083
300.00	48.9	0.101
400.00	58.2	0.097
500.00	66.2	0.080
600.00	73.5	0.074
700.00	80.6	0.070
800.00	86.9	0.059
900.00	91.0	0.045
1000.00	94.2	0.032
2000.00	100.0	0.058

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.012	0.23027E+06
0.026	0.94850E+05
0.032	0.53664E+05
0.037	0.34982E+05
0.041	0.24827E+05
0.044	0.18648E+05
0.047	0.14587E+05
0.050	0.11763E+05
0.052	0.97130E+04
0.062	0.68752E+04
0.077	0.28809E+04
0.087	0.16108E+04
0.095	0.10188E+04
0.100	0.66624E+03
0.102	0.44760E+03
0.104	0.33767E+03
0.105	0.28346E+03
0.107	0.24997E+03
0.123	0.20613E+03
0.156	0.95848E+02
0.191	0.55604E+02
0.223	0.36643E+02
0.251	0.26623E+02
0.277	0.19020E+02
0.300	0.15424E+02
0.318	0.12045E+02
0.332	0.94585E+01
0.348	0.51777E+01

ALPHA = 1.38



SOIL HORIZON NUMBER 38 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.70 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.054	0.150E+05
0.076	0.600E+04
0.109	0.200E+04
0.160	0.100E+04
0.167	0.330E+03
0.173	0.100E+03
0.192	0.600E+02
0.253	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

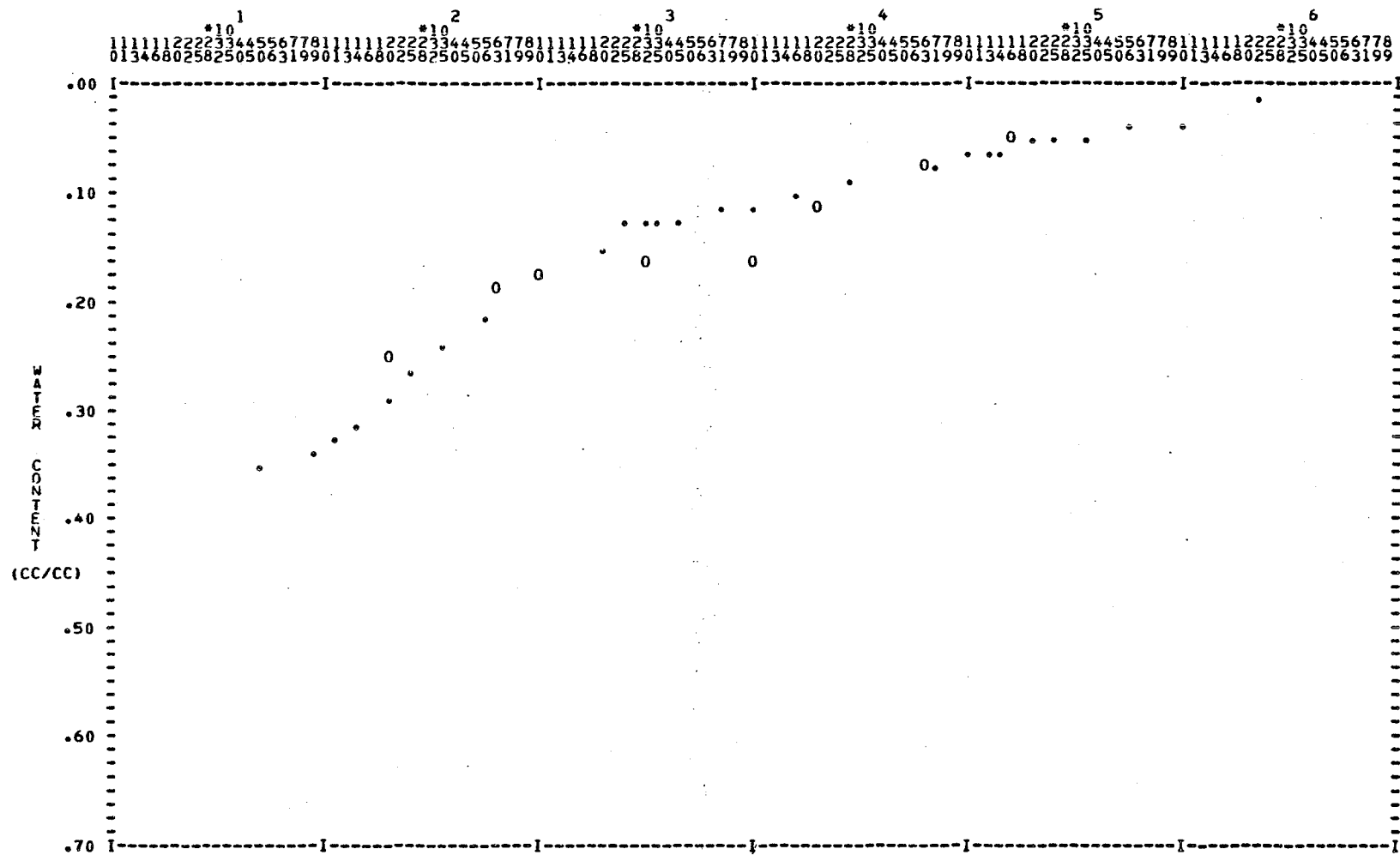
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	5.8	0.058
2.00	8.9	0.031
3.00	10.9	0.020
4.00	12.4	0.016
5.00	13.7	0.013
6.00	14.9	0.011
7.00	15.9	0.010
8.00	16.8	0.009
9.00	17.6	0.008
10.00	18.3	0.007
20.00	33.6	0.053
30.00	37.3	0.037
40.00	40.0	0.028
50.00	42.0	0.020
60.00	43.3	0.012
70.00	44.4	0.007
80.00	44.9	0.005
90.00	45.4	0.006
100.00	45.9	0.007
200.00	50.0	0.094
300.00	53.0	0.100
400.00	53.7	0.007
500.00	54.0	0.071
600.00	54.7	0.064
700.00	55.3	0.060
800.00	55.8	0.050
900.00	56.1	0.039
1000.00	56.1	0.029
2000.00	100.0	0.050

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.016	0.235336E+06
0.033	0.568559E+05
0.047	0.547425E+05
0.051	0.355674E+05
0.053	0.255317E+05
0.055	0.190188E+05
0.058	0.148786E+05
0.062	0.120000E+05
0.064	0.991111E+04
0.075	0.702222E+04
0.091	0.299373E+04
0.103	0.164010E+04
0.111	0.105333E+04
0.117	0.686667E+03
0.120	0.448889E+03
0.123	0.336667E+03
0.124	0.260000E+03
0.126	0.193333E+03
0.127	0.140000E+03
0.129	0.106667E+03
0.130	0.800000E+02
0.133	0.600000E+02
0.136	0.440000E+02
0.139	0.320000E+02
0.140	0.240000E+02
0.142	0.180000E+02
0.144	0.133333E+02
0.146	0.100000E+02
0.148	0.733333E+01
0.150	0.500000E+01
0.152	0.366667E+01
0.154	0.266667E+01
0.156	0.193333E+01
0.158	0.140000E+01
0.160	0.106667E+01
0.162	0.800000E+00
0.164	0.600000E+00
0.166	0.440000E+00
0.168	0.320000E+00
0.170	0.240000E+00
0.172	0.180000E+00
0.174	0.133333E+00
0.176	0.100000E+00
0.178	0.733333E-01
0.180	0.500000E-01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



B-77

SOIL HORIZON NUMBER 39 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.54 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.060	0.150E+05
0.066	0.600E+04
0.095	0.200E+04
0.137	0.100E+04
0.146	0.330E+03
0.157	0.100E+03
0.177	0.600E+02
0.242	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	6.1	0.061
2.00	8.8	0.027
3.00	10.6	0.018
4.00	12.0	0.015
5.00	13.3	0.012
6.00	14.3	0.011
7.00	15.3	0.010
8.00	16.2	0.009
9.00	17.0	0.008
10.00	17.7	0.007
20.00	23.0	0.053
30.00	26.9	0.039
40.00	29.8	0.030
50.00	31.9	0.021
60.00	33.1	0.012
70.00	33.7	0.006
80.00	34.2	0.005
90.00	34.8	0.006
100.00	35.5	0.007
200.00	45.1	0.096
300.00	55.5	0.105
400.00	64.4	0.089
500.00	71.6	0.072
600.00	78.0	0.064
700.00	83.9	0.059
800.00	88.9	0.049
900.00	92.7	0.039
1000.00	95.6	0.029
2000.00	100.0	0.044

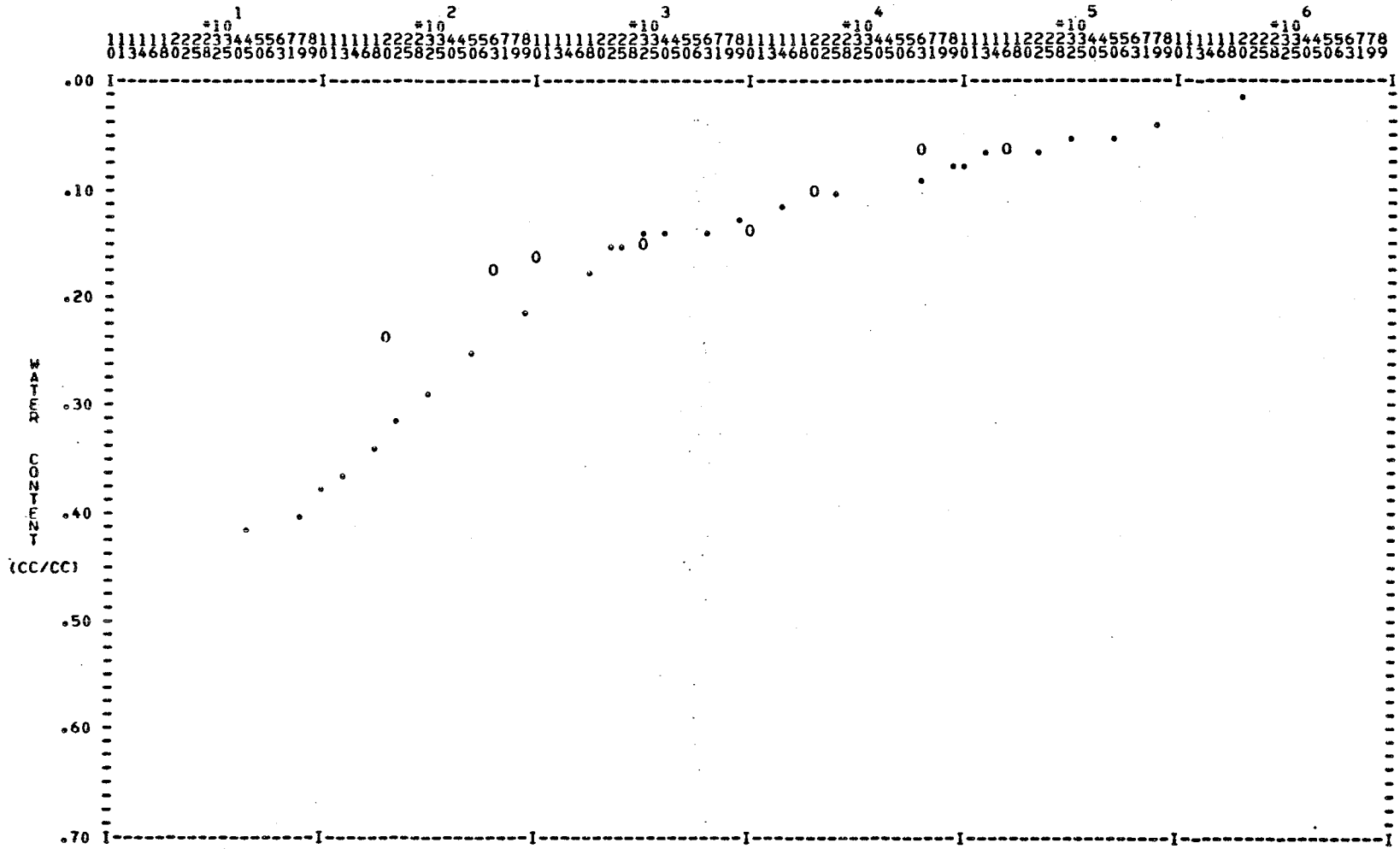
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.018	0.20232E+06
0.041	0.83613E+05
0.047	0.47533E+05
0.053	0.31083E+05
0.058	0.22111E+05
0.062	0.16639E+05
0.066	0.13035E+05
0.069	0.10525E+05
0.073	0.87016E+04
0.085	0.61849E+04
0.104	0.26118E+04
0.119	0.14638E+04
0.129	0.92373E+03
0.136	0.60592E+03
0.140	0.41385E+03
0.142	0.31640E+03
0.145	0.26525E+03
0.147	0.23230E+03
0.169	0.18635E+03
0.211	0.84969E+02
0.251	0.48583E+02
0.285	0.31410E+02
0.313	0.22468E+02
0.339	0.17001E+02
0.362	0.13127E+02
0.380	0.10302E+02
0.394	0.81606E+01
0.410	0.43260E+01

ALPHA = 1.38



SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 39

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.23036E+01

SOIL HORIZON NUMBER 40 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.63 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.064	0.150E+05
0.073	0.600E+04
0.096	0.200E+04
0.109	0.100E+04
0.121	0.330E+03
0.132	0.100E+03
0.158	0.600E+02
0.238	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	9.9	0.099
2.00	11.1	0.012
3.00	11.9	0.008
4.00	12.6	0.007
5.00	13.2	0.006
6.00	13.7	0.006
7.00	14.3	0.005
8.00	14.8	0.005
9.00	15.3	0.005
10.00	15.7	0.005
20.00	19.6	0.039
30.00	22.6	0.030
40.00	25.0	0.023
50.00	26.8	0.018
60.00	28.3	0.015
70.00	29.6	0.013
80.00	30.9	0.012
90.00	32.1	0.011
100.00	33.2	0.011
200.00	48.2	0.150
300.00	60.3	0.120
400.00	69.9	0.092
500.00	76.4	0.069
600.00	81.8	0.054
700.00	86.3	0.044
800.00	89.8	0.035
900.00	92.6	0.028
1000.00	94.8	0.022
2000.00	100.0	0.052

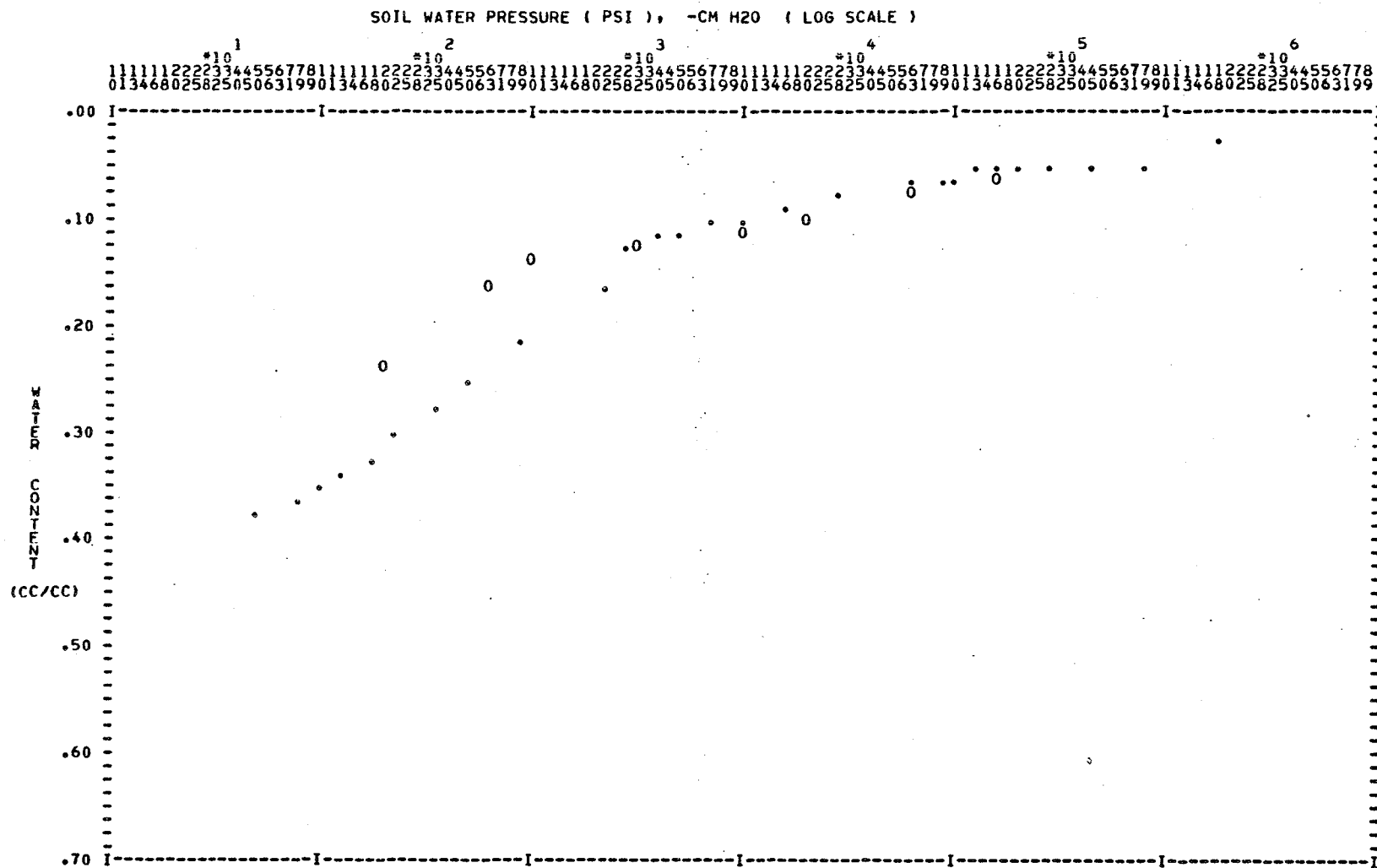
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.021	0.18627E+06
0.044	0.76936E+05
0.047	0.44100E+05
0.050	0.29183E+05
0.052	0.20999E+05
0.054	0.15967E+05
0.056	0.12624E+05
0.058	0.10278E+05
0.060	0.85599E+04
0.068	0.62333E+04
0.081	0.26741E+04
0.092	0.15040E+04
0.100	0.96777E+03
0.106	0.67959E+03
0.112	0.51082E+03
0.116	0.44024E+03
0.121	0.39378E+03
0.126	0.35333E+03
0.157	0.22174E+03
0.179	0.93366E+02
0.209	0.53266E+02
0.250	0.33333E+02
0.281	0.23333E+02
0.300	0.17333E+02
0.339	0.11333E+02
0.351	0.10433E+02
0.375	0.83333E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 40

0 MEASURED :

0 PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.23753E+01

SOIL HORIZON NUMBER 41 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.75 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.037	0.150E+05
0.044	0.600E+04
0.054	0.200E+04
0.096	0.100E+04
0.105	0.330E+03
0.112	0.100E+03
0.133	0.600E+02
0.210	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

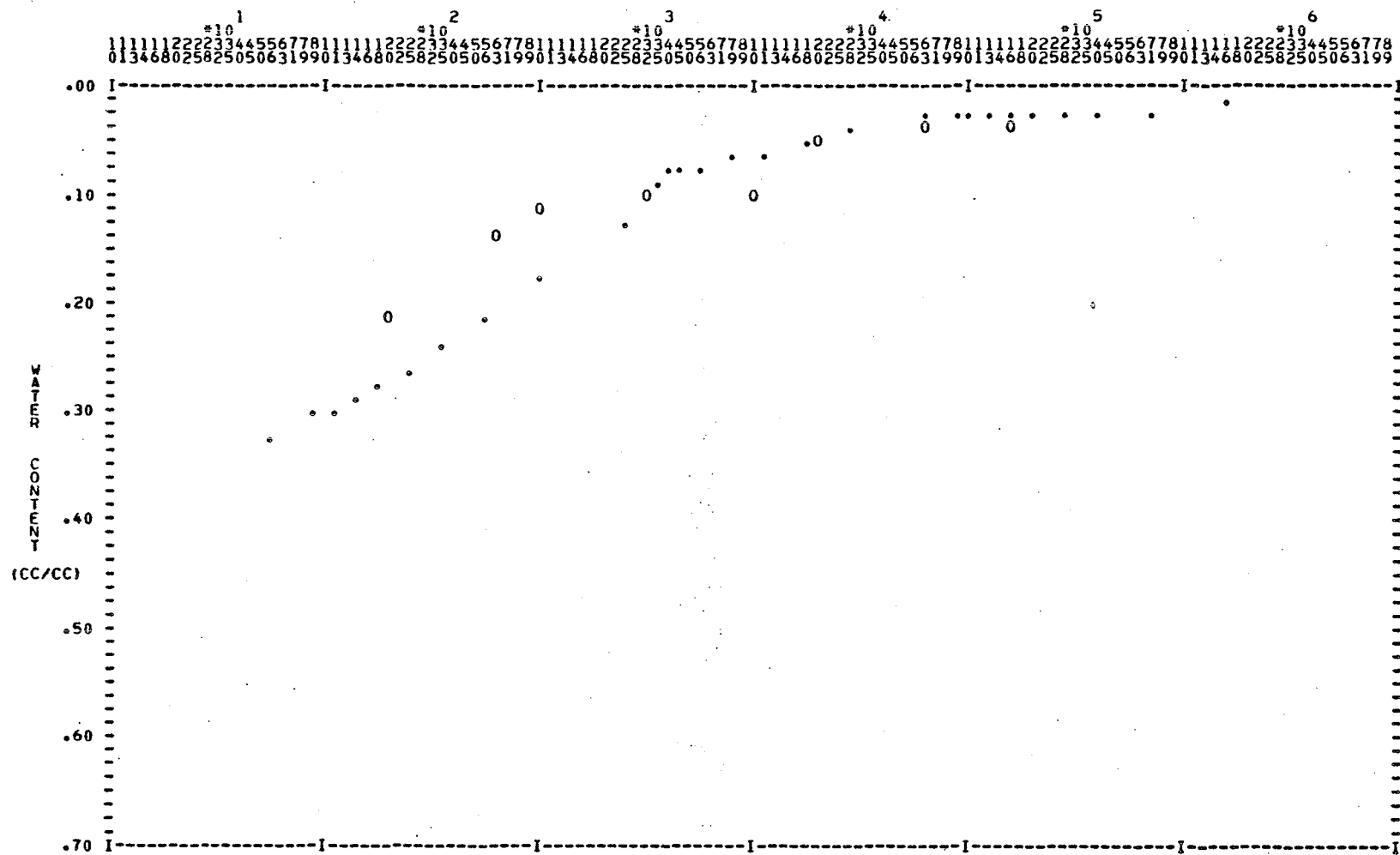
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	5.5	0.055
2.00	5.8	0.003
3.00	6.0	0.002
4.00	6.3	0.003
5.00	6.6	0.003
6.00	6.9	0.003
7.00	7.2	0.003
8.00	7.5	0.003
9.00	7.7	0.003
10.00	8.0	0.003
20.00	10.3	0.023
30.00	13.2	0.029
40.00	16.1	0.029
50.00	18.4	0.023
60.00	20.0	0.016
70.00	21.3	0.013
80.00	22.8	0.016
90.00	24.9	0.020
100.00	27.4	0.025
200.00	47.4	0.200
300.00	59.0	0.117
400.00	67.2	0.082
500.00	73.6	0.064
600.00	78.7	0.051
700.00	82.7	0.041
800.00	86.1	0.034
900.00	88.9	0.029
1000.00	91.4	0.025
2000.00	100.0	0.086

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.010	0.15872E+06
0.020	0.68250E+05
0.021	0.41047E+05
0.022	0.27822E+05
0.023	0.20310E+05
0.024	0.15582E+05
0.025	0.12401E+05
0.026	0.10145E+05
0.027	0.84806E+04
0.031	0.62373E+04
0.040	0.29223E+04
0.050	0.17277E+04
0.059	0.11161E+04
0.065	0.75432E+03
0.070	0.56121E+03
0.075	0.46466E+03
0.081	0.40076E+03
0.089	0.35112E+03
0.127	0.25361E+03
0.181	0.10267E+03
0.214	0.56653E+02
0.259	0.36374E+02
0.274	0.25402E+02
0.287	0.18740E+02
0.297	0.14447E+02
0.306	0.11509E+02
0.325	0.94064E+01
	0.58167E+01

ALPHA = 1.38

# SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 42 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.46 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.048	0.150E+05
0.054	0.600E+04
0.073	0.200E+04
0.200	0.100E+04
0.238	0.330E+03
0.331	0.100E+03
0.350	0.600E+02
0.399	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

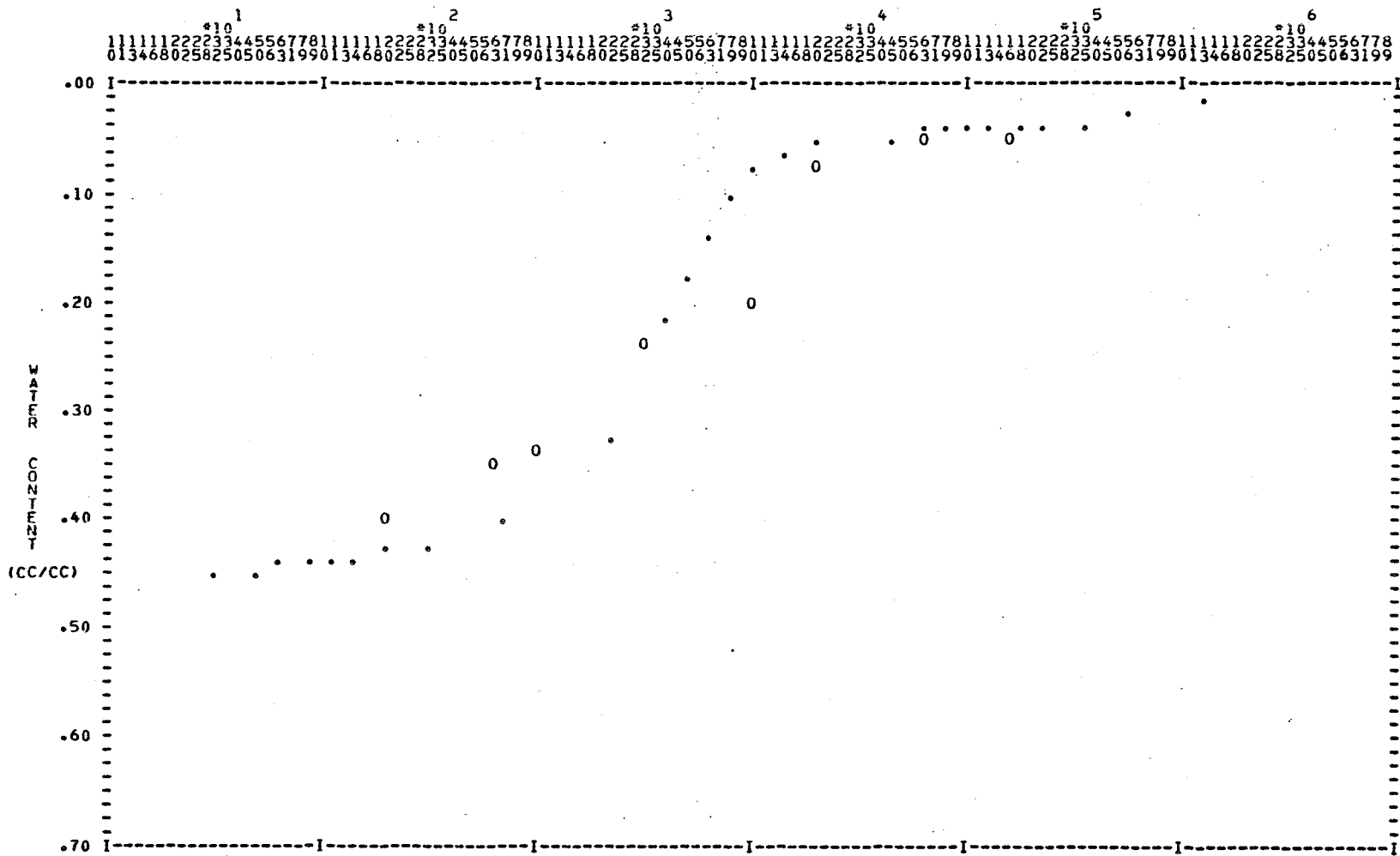
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	6.1	0.061
2.00	6.4	0.003
3.00	6.7	0.003
4.00	7.2	0.004
5.00	7.6	0.004
6.00	8.0	0.004
7.00	8.3	0.003
8.00	8.6	0.003
9.00	8.9	0.003
10.00	9.1	0.002
20.00	10.7	0.016
30.00	11.9	0.012
40.00	14.5	0.025
50.00	18.3	0.038
60.00	25.3	0.070
70.00	34.5	0.092
80.00	43.3	0.088
90.00	50.7	0.074
100.00	56.2	0.055
200.00	87.4	0.312
300.00	93.1	0.057
400.00	94.7	0.016
500.00	95.8	0.011
600.00	96.7	0.009
700.00	97.5	0.008
800.00	98.2	0.007
900.00	98.7	0.005
1000.00	99.1	0.004
2000.00	100.0	0.009

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.014	0.12552E+06
0.030	0.57809E+05
0.031	0.35387E+05
0.033	0.23663E+05
0.035	0.16973E+05
0.036	0.12803E+05
0.038	0.10026E+05
0.039	0.80782E+04
0.040	0.66574E+04
0.044	0.46258E+04
0.051	0.19808E+04
0.059	0.13376E+04
0.074	0.97397E+03
0.098	0.79824E+03
0.134	0.64639E+03
0.175	0.51197E+03
0.211	0.40645E+03
0.240	0.32313E+03
0.322	0.21925E+03
0.405	0.71215E+02
0.422	0.33060E+02
0.428	0.20687E+02
0.432	0.14633E+02
0.436	0.10955E+02
0.439	0.84228E+01
0.442	0.66058E+01
0.444	0.52471E+01
0.447	0.30091E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 42

0 MEASURED ;      • PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.32144E+01

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SOIL HORIZON NUMBER 43 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.59 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.025	0.150E+05
0.032	0.600E+04
0.049	0.200E+04
0.130	0.100E+04
0.186	0.330E+03
0.242	0.100E+03
0.264	0.600E+02
0.323	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	4.1	0.041
2.00	4.7	0.006
3.00	5.3	0.006
4.00	6.0	0.007
5.00	6.6	0.006
6.00	7.2	0.006
7.00	7.7	0.005
8.00	8.1	0.005
9.00	8.5	0.004
10.00	8.9	0.004
20.00	11.3	0.024
30.00	13.4	0.021
40.00	16.3	0.029
50.00	19.8	0.035
60.00	27.6	0.078
70.00	38.7	0.111
80.00	49.2	0.105
90.00	57.6	0.084
100.00	63.3	0.057
200.00	89.4	0.261
300.00	93.5	0.041
400.00	94.8	0.013
500.00	95.8	0.010
600.00	96.7	0.009
700.00	97.5	0.008
800.00	98.2	0.007
900.00	98.7	0.006
1000.00	99.2	0.005
2000.00	100.0	0.008

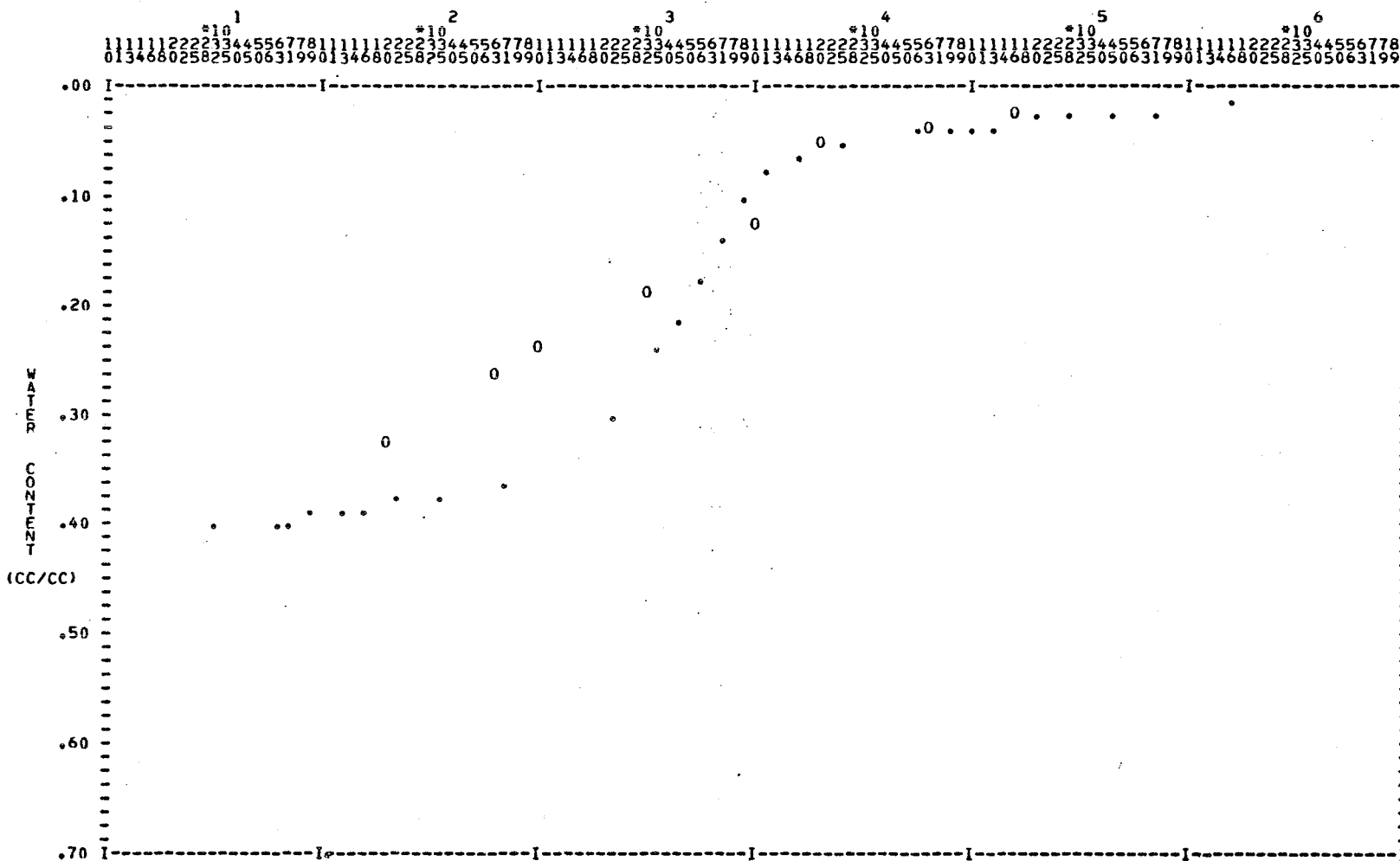
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.009	0.15898E+06
0.020	0.70862E+05
0.023	0.42676E+05
0.025	0.28404E+05
0.028	0.20329E+05
0.030	0.15317E+05
0.032	0.11986E+05
0.033	0.96533E+04
0.035	0.79534E+04
0.040	0.55266E+04
0.049	0.24132E+04
0.059	0.15197E+04
0.077	0.10593E+04
0.095	0.89978E+03
0.133	0.74065E+03
0.176	0.58583E+03
0.214	0.46096E+03
0.248	0.35925E+03
0.305	0.23431E+03
0.366	0.17395E+03
0.376	0.13504E+03
0.388	0.12659E+03
0.399	0.11613E+03
0.399	0.12073E+03
0.399	0.93408E+02
0.399	0.74136E+02
0.398	0.60009E+02
0.398	0.32536E+01

ALPHA = 1.38



SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 43

0 MEASURED ; • PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.31733E+01

SOIL HORIZON NUMBER 44 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.54 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.065	0.150E+05
0.077	0.600E+04
0.095	0.200E+04
0.177	0.100E+04
0.220	0.330E+03
0.262	0.100E+03
0.282	0.600E+02
0.340	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

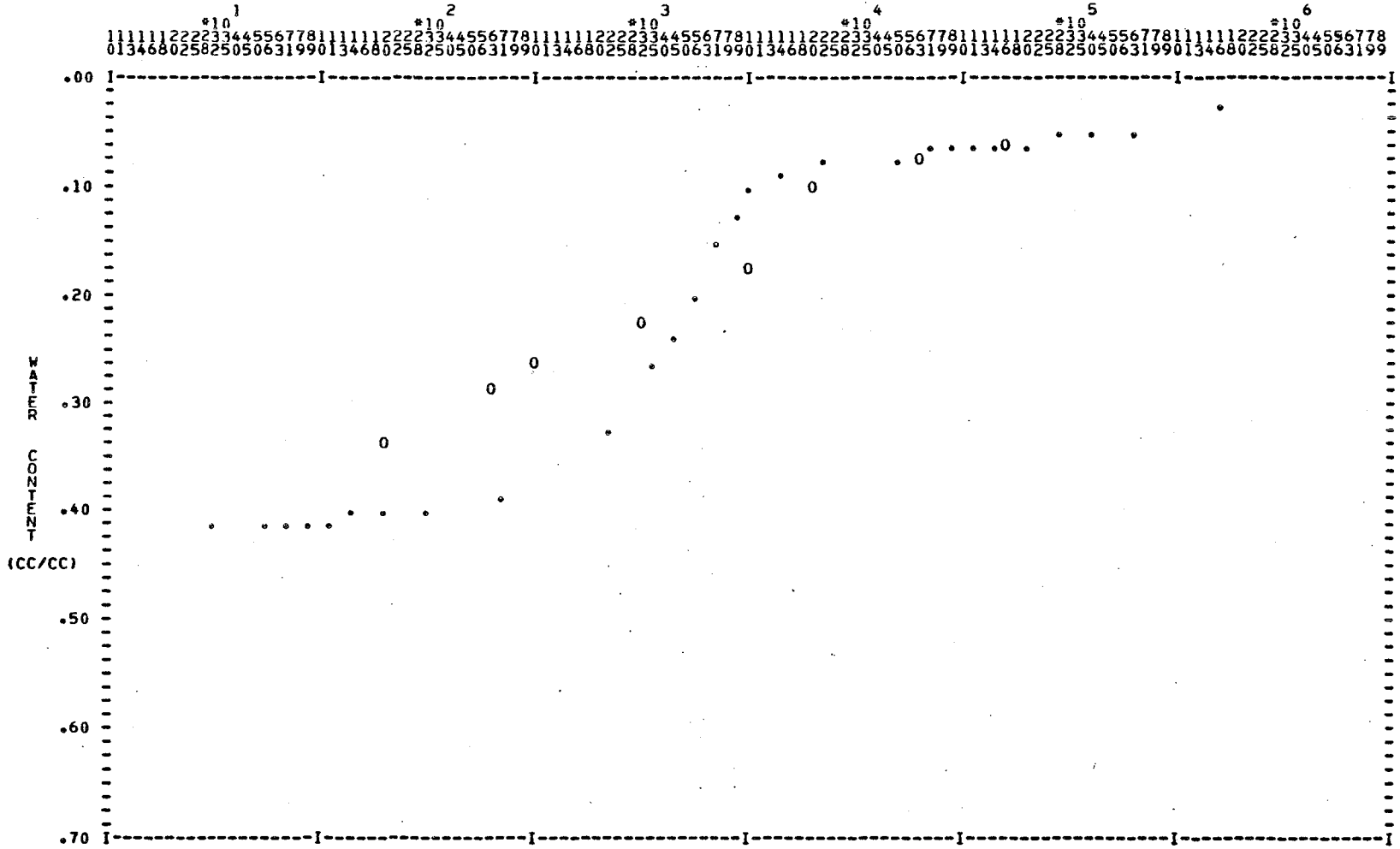
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	11.0	0.110
2.00	11.6	0.006
3.00	12.1	0.005
4.00	12.7	0.006
5.00	13.3	0.006
6.00	13.8	0.005
7.00	14.3	0.005
8.00	14.7	0.004
9.00	15.0	0.004
10.00	15.4	0.003
20.00	17.5	0.021
30.00	19.3	0.018
40.00	21.0	0.026
50.00	23.2	0.033
60.00	25.3	0.071
70.00	27.2	0.100
80.00	29.7	0.095
90.00	31.4	0.077
100.00	34.7	0.053
200.00	50.5	0.258
300.00	64.4	0.039
400.00	65.5	0.011
500.00	66.4	0.009
600.00	67.1	0.007
700.00	67.8	0.006
800.00	68.3	0.005
900.00	68.8	0.005
1000.00	69.2	0.004
2000.00	100.0	0.008

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.024	0.14988E+06
0.050	0.66752E+05
0.052	0.40185E+05
0.055	0.26742E+05
0.057	0.19139E+05
0.059	0.14420E+05
0.061	0.11283E+05
0.062	0.90873E+04
0.064	0.74869E+04
0.069	0.52023E+04
0.077	0.22588E+04
0.086	0.14326E+04
0.099	0.10055E+04
0.120	0.84933E+03
0.156	0.89775E+03
0.197	0.55238E+03
0.233	0.43568E+03
0.260	0.34132E+03
0.325	0.22499E+03
0.387	0.70375E+02
0.398	0.32678E+02
0.402	0.21073E+02
0.408	0.14921E+02
0.411	0.11143E+02
0.413	0.86396E+01
0.415	0.68927E+01
0.419	0.56229E+01
0.417	0.31290E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), .-CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 44

0 MEASURED ;      • PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.35270E+01

SOIL HORIZON NUMBER 45 ( SEE TABLE 4 FOR IDENTIFICATION )

# DENSITY DATA:

BULK DENSITY = 1.48 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

# MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.062	0.150E+05
0.077	0.600E+04
0.090	0.200E+04
0.141	0.100E+04
0.164	0.330E+03
0.223	0.100E+03
0.268	0.600E+02
0.345	0.200E+02

# PARTICLE SIZE DISTRIBUTION DATA

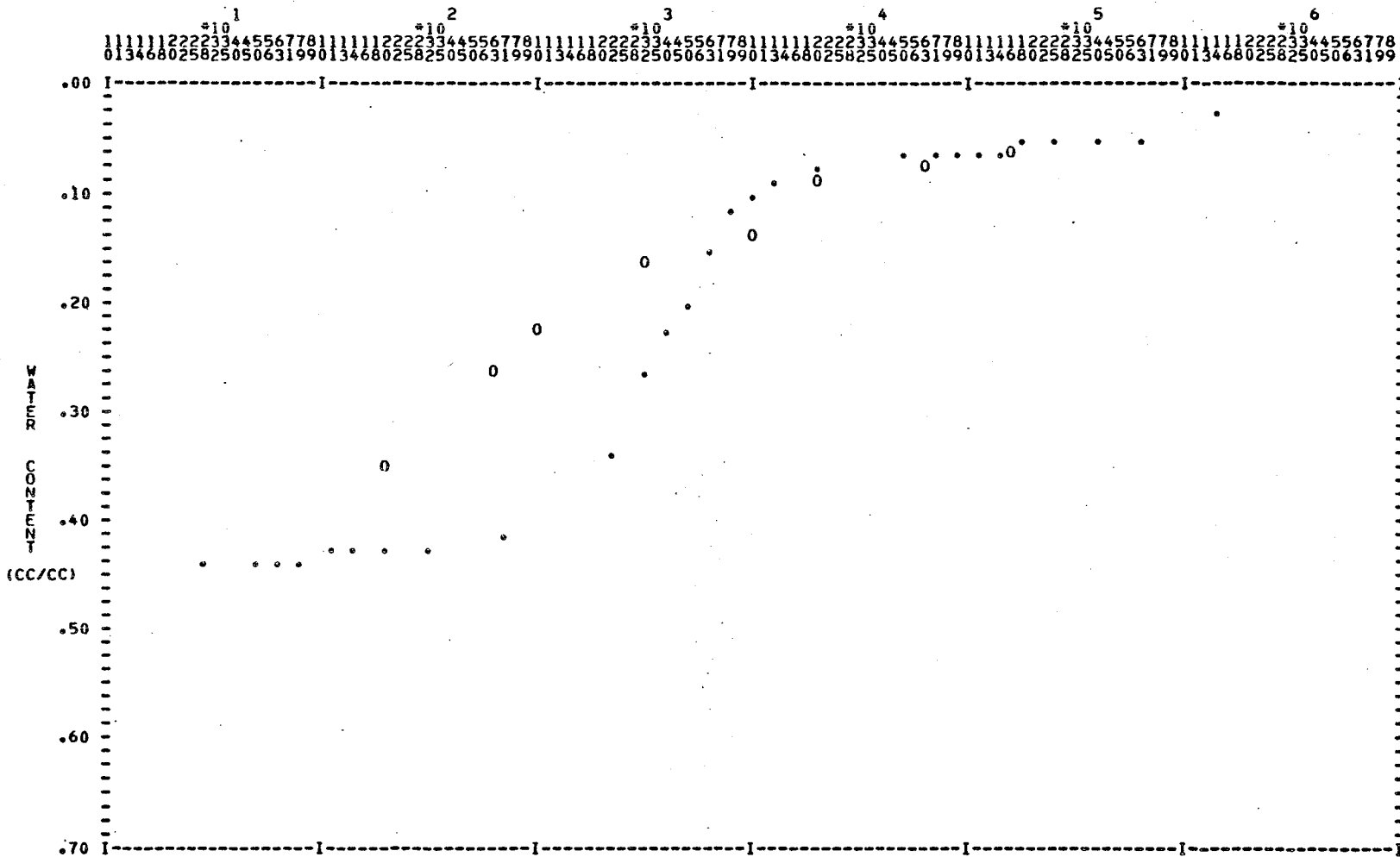
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	10.2	0.102
2.00	10.8	0.006
3.00	11.3	0.005
4.00	11.9	0.006
5.00	12.4	0.005
6.00	12.9	0.005
7.00	13.3	0.004
8.00	13.7	0.004
9.00	14.1	0.003
10.00	14.4	0.003
20.00	16.4	0.020
30.00	17.8	0.014
40.00	20.1	0.023
50.00	23.3	0.032
60.00	30.0	0.067
70.00	39.4	0.094
80.00	48.4	0.090
90.00	55.9	0.075
100.00	61.3	0.054
200.00	90.5	0.292
300.00	94.8	0.043
400.00	95.8	0.010
500.00	96.6	0.008
600.00	97.3	0.007
700.00	98.0	0.006
800.00	98.5	0.005
900.00	98.9	0.004
1000.00	99.3	0.004
2000.00	100.0	0.007

# PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.024	0.14314E+06
0.049	0.63418E+05
0.051	0.38056E+05
0.054	0.25299E+05
0.056	0.18098E+05
0.058	0.13629E+05
0.060	0.10662E+05
0.061	0.85849E+04
0.063	0.70718E+04
0.068	0.49112E+04
0.076	0.20685E+04
0.084	0.13330E+04
0.096	0.95395E+03
0.118	0.80322E+03
0.153	0.65858E+03
0.194	0.52242E+03
0.230	0.41390E+03
0.259	0.32714E+03
0.335	0.21985E+03
0.409	0.8574E+02
0.421	0.30597E+02
0.425	0.19822E+02
0.428	0.14189E+02
0.431	0.10619E+02
0.434	0.82122E+01
0.436	0.5125E+01
0.438	0.2649E+01
0.440	0.29129E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 45

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.37829E+01

SOIL HORIZON NUMBER 46 ( SEE TABLE 4 FOR IDENTIFICATION )

# DENSITY DATA:

BULK DENSITY = 1.43 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

# MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.059	0.150E+05
0.070	0.600E+04
0.086	0.200E+04
0.149	0.100E+04
0.176	0.330E+03
0.232	0.100E+03
0.193	0.600E+02
0.320	0.200E+02

# PARTICLE SIZE DISTRIBUTION DATA

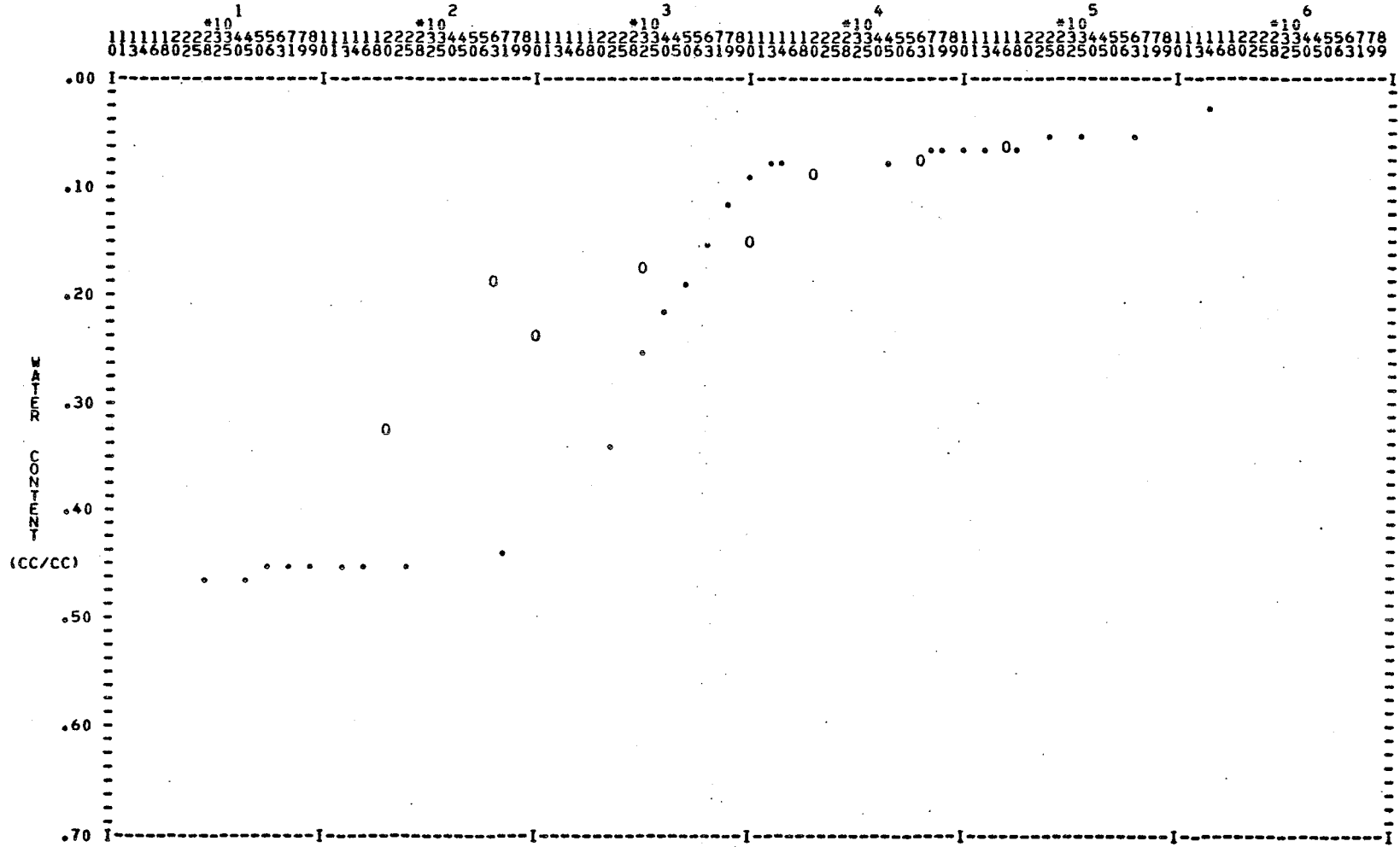
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	10.2	0.102
2.00	10.8	0.006
3.00	11.3	0.005
4.00	11.9	0.006
5.00	12.4	0.005
6.00	12.8	0.005
7.00	13.3	0.004
8.00	13.6	0.004
9.00	13.9	0.003
10.00	14.2	0.003
20.00	16.1	0.019
30.00	16.3	0.002
40.00	17.9	0.016
50.00	21.8	0.039
60.00	28.4	0.066
70.00	36.4	0.080
80.00	44.1	0.076
90.00	50.7	0.066
100.00	56.0	0.053
200.00	91.6	0.356
300.00	97.0	0.054
400.00	97.4	0.004
500.00	97.7	0.003
600.00	98.2	0.005
700.00	98.6	0.004
800.00	98.9	0.003
900.00	99.2	0.003
1000.00	99.4	0.002
2000.00	100.0	0.006

# PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.025	0.13977E+06
0.051	0.61122E+05
0.053	0.36377E+05
0.056	0.24118E+05
0.058	0.17228E+05
0.060	0.12965E+05
0.062	0.10137E+05
0.063	0.81599E+04
0.065	0.67201E+04
0.070	0.46652E+04
0.075	0.14061E+04
0.079	0.11978E+04
0.091	0.95442E+03
0.116	0.77151E+03
0.149	0.61495E+03
0.185	0.48716E+03
0.218	0.38938E+03
0.246	0.31387E+03
0.340	0.21972E+03
0.434	0.68905E+02
0.447	0.24711E+02
0.449	0.16192E+02
0.451	0.12531E+02
0.453	0.93888E+01
0.455	0.72496E+01
0.456	0.57284E+01
0.457	0.46043E+01
0.459	0.27231E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 46

0 MEASURED :      . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.3348E+01

SOIL HORIZON NUMBER 47 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.46 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.093	0.150E+05
0.136	0.600E+04
0.229	0.200E+04
0.318	0.100E+04
0.333	0.330E+03
0.371	0.100E+03
0.385	0.600E+02
0.400	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	9.6	0.096
2.00	14.3	0.047
3.00	17.7	0.034
4.00	20.8	0.031
5.00	23.6	0.029
6.00	26.2	0.026
7.00	28.6	0.024
8.00	30.8	0.022
9.00	32.9	0.021
10.00	34.8	0.019
20.00	49.4	0.146
30.00	63.4	0.140
40.00	74.6	0.113
50.00	81.1	0.065
60.00	84.7	0.036
70.00	87.3	0.026
80.00	89.1	0.018
90.00	90.2	0.011
100.00	90.8	0.006
200.00	93.4	0.026
300.00	95.0	0.016
400.00	96.1	0.011
500.00	97.0	0.009
600.00	97.7	0.007
700.00	98.3	0.006
800.00	98.7	0.005
900.00	99.1	0.004
1000.00	99.4	0.003
2000.00	100.0	0.006

PREDICTED MOISTURE CHARACTERISTIC DATA

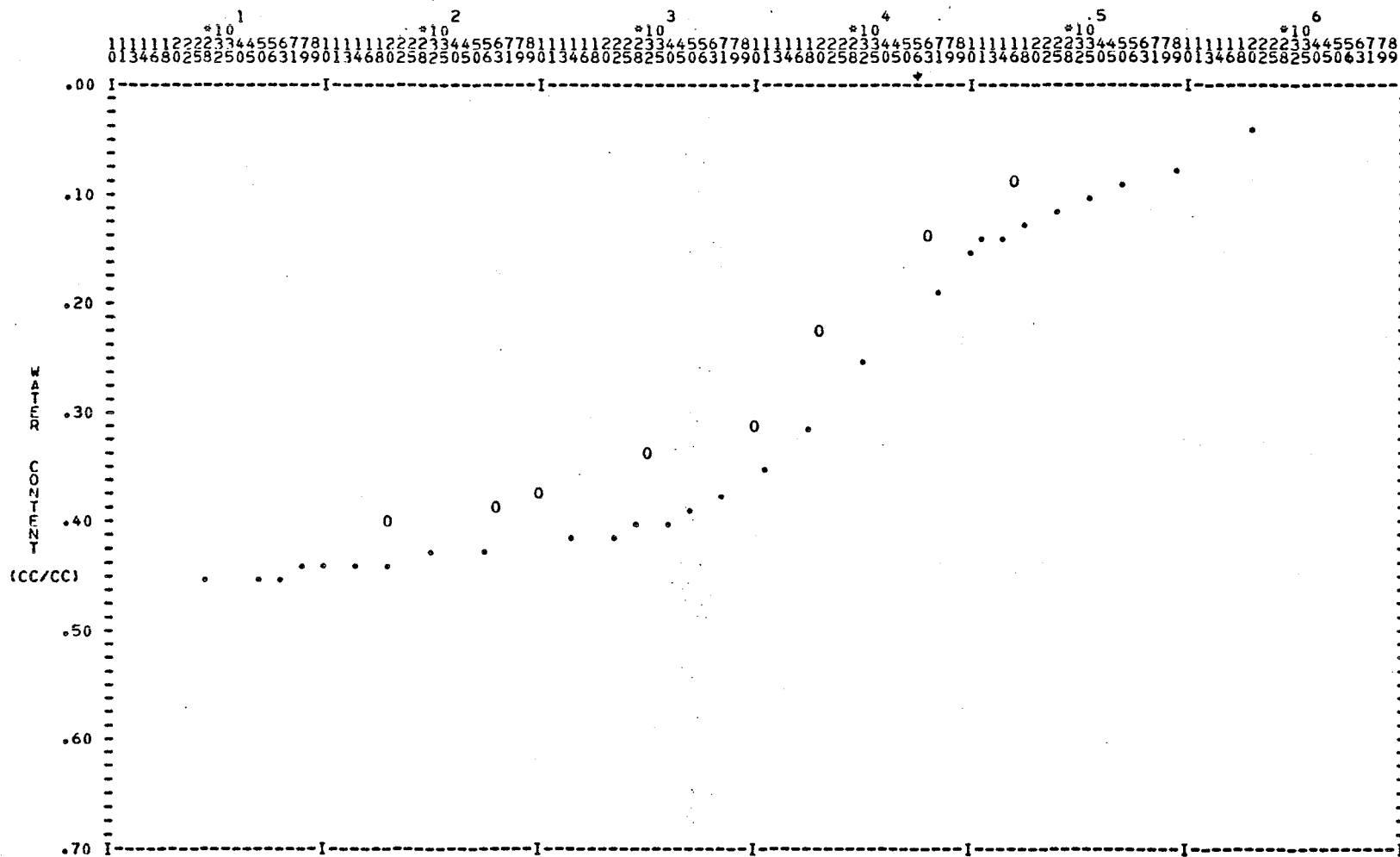
SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.032	0.21093E+06
0.072	0.88867E+05
0.086	0.51713E+05
0.100	0.34239E+05
0.112	0.24554E+05
0.123	0.18585E+05
0.134	0.14625E+05
0.143	0.11855E+05
0.152	0.98855E+04
0.169	0.70515E+04
0.253	0.31365E+04
0.310	0.17754E+04
0.350	0.10762E+04
0.372	0.70341E+03
0.386	0.50762E+03
0.396	0.37745E+03
0.402	0.28446E+03
0.406	0.21271E+03
0.414	0.13271E+03
0.423	0.55727E+02
0.429	0.30842E+02
0.434	0.19787E+02
0.437	0.13874E+02
0.440	0.10261E+02
0.442	0.78691E+01
0.444	0.61990E+01
0.446	0.49822E+01
0.448	0.27860E+01

ALPHA = 1.38

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SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 47

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.49374E+01

SOIL HORIZON NUMBER 48 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.49 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.124	0.150E+05
0.165	0.600E+04
0.253	0.200E+04
0.332	0.100E+04
0.346	0.330E+03
0.361	0.100E+03
0.374	0.600E+02
0.398	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	14.5	0.145
2.00	20.2	0.057
3.00	24.2	0.040
4.00	27.7	0.036
5.00	30.9	0.032
6.00	33.7	0.028
7.00	36.3	0.026
8.00	38.6	0.023
9.00	40.8	0.022
10.00	42.3	0.020
20.00	57.5	0.147
30.00	70.5	0.130
40.00	80.7	0.102
50.00	86.5	0.058
60.00	89.7	0.032
70.00	91.9	0.022
80.00	93.4	0.014
90.00	94.3	0.009
100.00	94.7	0.004
200.00	96.4	0.017
300.00	97.3	0.009
400.00	97.9	0.006
500.00	98.4	0.005
600.00	98.8	0.004
700.00	99.1	0.003
800.00	99.3	0.002
900.00	99.9	0.002
1000.00	99.6	0.001
2000.00	100.0	0.004

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.044	0.2245E+06
0.097	0.9396E+05
0.114	0.5421E+05
0.128	0.3571E+05
0.141	0.2552E+05
0.153	0.1926E+05
0.164	0.1512E+05
0.174	0.1223E+05
0.183	0.1013E+05
0.219	0.7228E+04
0.280	0.3165E+04
0.331	0.1781E+04
0.366	0.1080E+04
0.386	0.7045E+03
0.398	0.5040E+03
0.406	0.3718E+03
0.411	0.2778E+03
0.414	0.2044E+03
0.418	0.1290E+03
0.424	0.5130E+02
0.427	0.2823E+02
0.430	0.1805E+02
0.432	0.1255E+02
0.433	0.9230E+01
0.434	0.7059E+01
0.435	0.5559E+01
0.436	0.4429E+01
0.437	0.2639E+01

ALPHA = 1.38



SOIL HORIZON NUMBER 49 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.49 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.171	0.150E+05
0.195	0.600E+04
0.283	0.200E+04
0.358	0.100E+04
0.364	0.330E+03
0.372	0.100E+03
0.384	0.600E+02
0.405	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	26.9	0.269
2.00	30.1	0.032
3.00	32.5	0.024
4.00	34.7	0.023
5.00	36.9	0.021
6.00	38.9	0.020
7.00	40.7	0.018
8.00	42.4	0.017
9.00	44.1	0.016
10.00	45.6	0.015
20.00	57.6	0.120
30.00	70.0	0.124
40.00	80.4	0.104
50.00	86.5	0.061
60.00	90.1	0.036
70.00	92.7	0.026
80.00	94.5	0.018
90.00	95.6	0.011
100.00	96.1	0.005
200.00	97.8	0.017
300.00	98.5	0.007
400.00	98.9	0.004
500.00	99.2	0.003
600.00	99.4	0.002
700.00	99.6	0.002
800.00	99.8	0.001
900.00	99.8	0.001
1000.00	99.9	0.001
2000.00	100.0	0.001

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.066	0.20051E+06
0.137	0.84992E+05
0.147	0.49841E+05
0.157	0.33158E+05
0.166	0.23862E+05
0.174	0.18111E+05
0.182	0.14284E+05
0.189	0.11598E+05
0.196	0.96331E+04
0.226	0.69535E+04
0.279	0.31332E+04
0.329	0.17883E+04
0.365	0.10895E+04
0.386	0.71791E+03
0.400	0.52041E+03
0.410	0.38699E+03
0.416	0.29013E+03
0.419	0.21225E+03
0.424	0.12930E+03
0.430	0.48345E+02
0.432	0.26262E+02
0.434	0.16529E+02
0.435	0.11467E+02
0.436	0.84743E+01
0.436	0.64021E+01
0.437	0.48880E+01
0.437	0.36988E+01
0.438	0.20281E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 50 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.65 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.147	0.150E+05
0.173	0.600E+04
0.251	0.200E+04
0.330	0.100E+04
0.343	0.330E+03
0.353	0.100E+03
0.365	0.600E+02
0.376	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	15.5	0.155
2.00	18.8	0.033
3.00	21.2	0.024
4.00	23.4	0.023
5.00	25.6	0.021
6.00	27.6	0.020
7.00	29.4	0.019
8.00	31.2	0.018
9.00	32.6	0.017
10.00	34.6	0.016
20.00	47.8	0.132
30.00	60.7	0.129
40.00	71.3	0.107
50.00	78.2	0.069
60.00	82.8	0.046
70.00	86.5	0.036
80.00	89.2	0.027
90.00	91.0	0.018
100.00	92.0	0.010
200.00	95.7	0.037
300.00	97.1	0.013
400.00	97.9	0.009
500.00	98.5	0.006
600.00	98.9	0.004
700.00	99.2	0.003
800.00	99.4	0.002
900.00	99.6	0.002
1000.00	99.7	0.001
2000.00	100.0	0.003

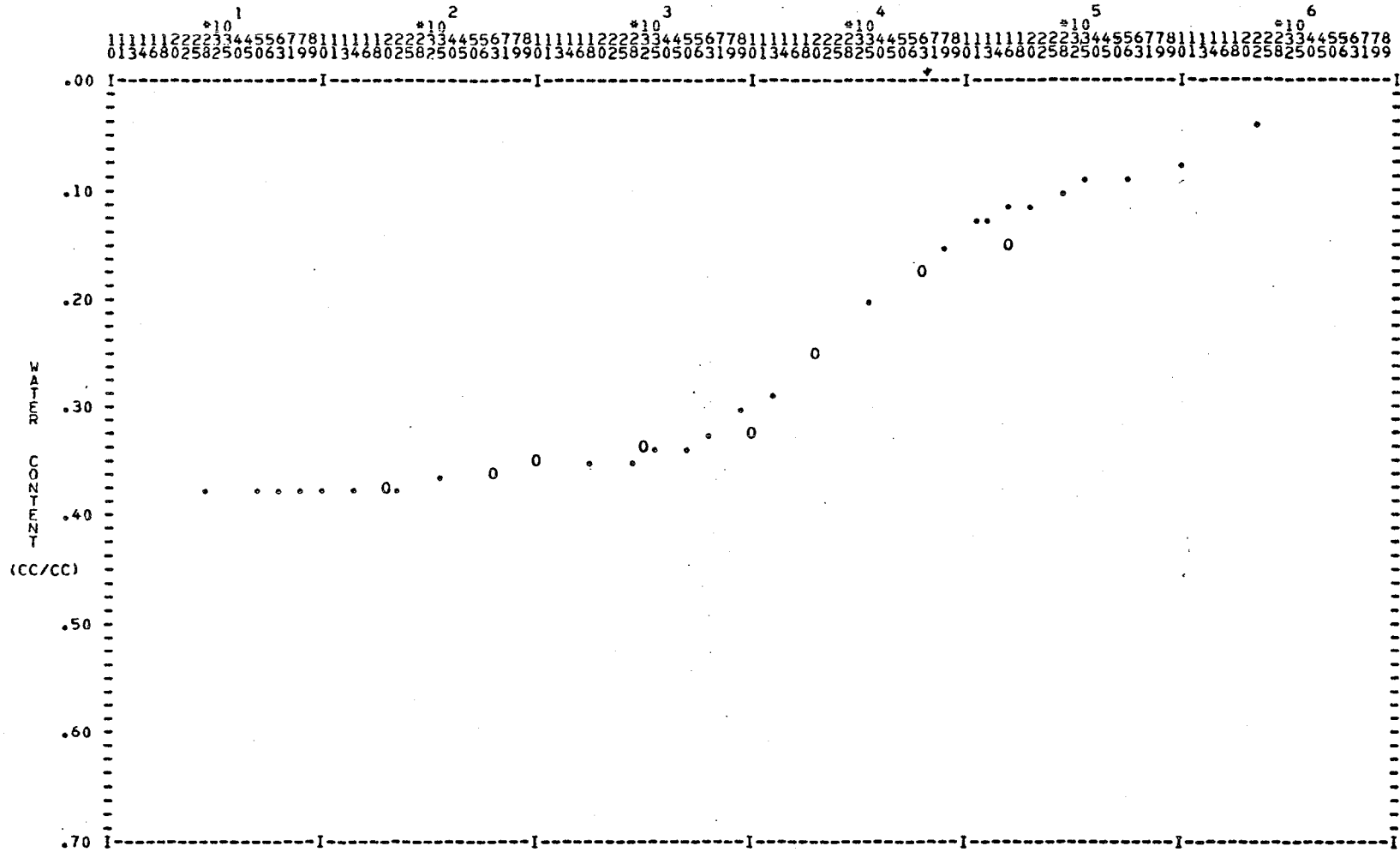
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.035	0.22947E+06
0.075	0.96520E+05
0.084	0.56370E+05
0.092	0.37548E+05
0.100	0.27083E+05
0.108	0.20607E+05
0.114	0.16292E+05
0.121	0.13257E+05
0.127	0.11034E+05
0.155	0.80292E+04
0.205	0.35816E+04
0.249	0.20370E+04
0.282	0.12626E+04
0.304	0.85558E+03
0.319	0.62868E+03
0.331	0.47342E+03
0.340	0.36076E+03
0.345	0.27278E+03
0.354	0.16983E+03
0.364	0.62701E+02
0.368	0.34061E+02
0.371	0.21146E+02
0.372	0.14409E+02
0.374	0.10582E+02
0.375	0.79981E+01
0.376	0.61507E+01
0.376	0.47503E+01
0.377	0.28322E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 50

0 MEASURED ;      . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.15471E+01

SOIL HORIZON NUMBER 51 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.87 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.118	0.150E+05
0.142	0.600E+04
0.209	0.200E+04
0.206	0.100E+04
0.221	0.330E+03
0.239	0.100E+03
0.249	0.600E+02
0.260	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	10.6	0.106
2.00	13.0	0.024
3.00	14.6	0.016
4.00	16.1	0.015
5.00	17.6	0.014
6.00	19.0	0.014
7.00	20.3	0.014
8.00	21.6	0.013
9.00	22.9	0.013
10.00	24.2	0.012
20.00	35.1	0.109
30.00	45.5	0.104
40.00	54.0	0.084
50.00	59.6	0.056
60.00	63.6	0.040
70.00	66.9	0.033
80.00	69.6	0.027
90.00	71.7	0.021
100.00	73.4	0.017
200.00	82.7	0.093
300.00	87.2	0.045
400.00	90.1	0.029
500.00	92.2	0.021
600.00	93.8	0.016
700.00	95.0	0.012
800.00	96.0	0.010
900.00	96.7	0.008
1000.00	97.4	0.007
2000.00	100.0	0.026

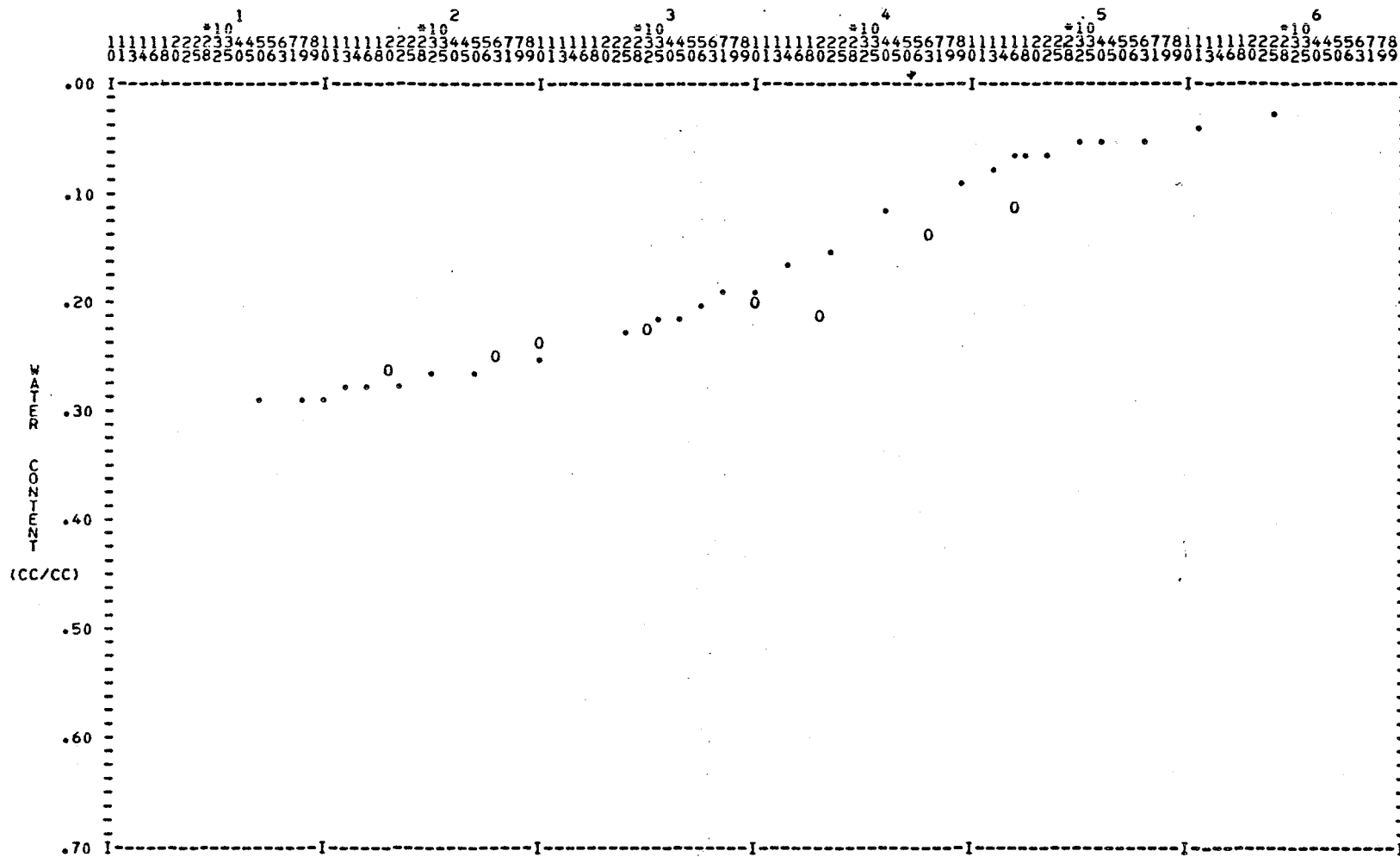
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.019	0.25993E+06
0.041	0.10813E+06
0.045	0.62880E+05
0.050	0.42065E+05
0.054	0.30510E+05
0.058	0.23337E+05
0.062	0.18537E+05
0.066	0.15148E+05
0.069	0.12654E+05
0.087	0.93311E+04
0.119	0.41470E+04
0.146	0.23486E+04
0.167	0.14665E+04
0.181	0.10027E+04
0.192	0.74323E+03
0.201	0.57054E+03
0.208	0.44946E+03
0.214	0.36094E+03
0.230	0.24341E+03
0.250	0.95109E+02
0.261	0.51751E+02
0.268	0.32255E+02
0.274	0.22589E+02
0.278	0.16556E+02
0.281	0.12668E+02
0.284	0.10010E+02
0.286	0.81093E+01
0.291	0.51457E+01

ALPHA = 1.38



SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 51

0 MEASURED ;

• PREDICTED

SUM OF (ABS(LOG(P<sub>SIM</sub>)-LOG(P<sub>SIP</sub>))) = 0.27947E+01

SOIL HORIZON NUMBER 52 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.84 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.132	0.150E+05
0.167	0.600E+04
0.239	0.200E+04
0.140	0.100E+04
0.147	0.330E+03
0.164	0.100E+03
0.180	0.600E+02
0.221	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	18.1	0.181
2.00	21.7	0.036
3.00	24.0	0.023
4.00	25.8	0.018
5.00	27.3	0.015
6.00	28.5	0.013
7.00	29.6	0.011
8.00	30.6	0.010
9.00	31.5	0.009
10.00	32.3	0.008
20.00	37.0	0.056
30.00	41.7	0.038
40.00	44.6	0.028
50.00	46.5	0.019
60.00	47.5	0.010
70.00	48.0	0.004
80.00	48.3	0.003
90.00	48.7	0.004
100.00	49.2	0.005
200.00	55.5	0.063
300.00	61.6	0.061
400.00	67.1	0.054
500.00	71.7	0.046
600.00	75.8	0.041
700.00	79.4	0.036
800.00	82.5	0.031
900.00	85.2	0.027
1000.00	87.6	0.024
2000.00	100.0	0.124

PREDICTED MOISTURE CHARACTERISTIC DATA

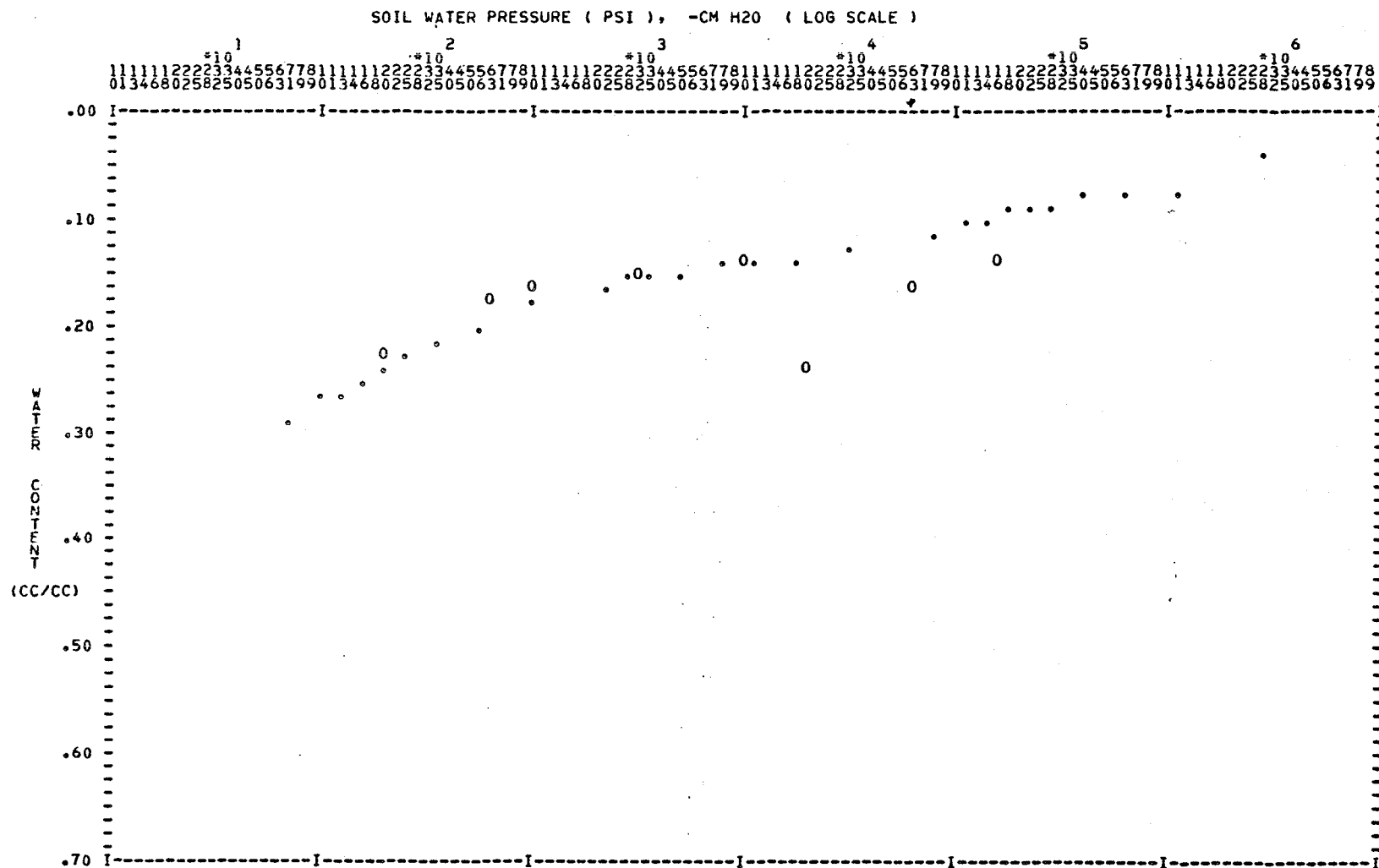
SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.033	0.27393E+06
0.070	0.11247E+06
0.076	0.63329E+05
0.081	0.41155E+05
0.085	0.29141E+05
0.089	0.21849E+05
0.092	0.17065E+05
0.095	0.13744E+05
0.098	0.11337E+05
0.107	0.79930E+04
0.122	0.33361E+04
0.132	0.18577E+04
0.139	0.11664E+04
0.144	0.75268E+03
0.146	0.49361E+03
0.147	0.36940E+03
0.148	0.31566E+03
0.150	0.28313E+03
0.160	0.22001E+03
0.179	0.98275E+02
0.197	0.56604E+02
0.212	0.37625E+02
0.225	0.26349E+02
0.237	0.19801E+02
0.247	0.15415E+02
0.256	0.12331E+02
0.264	0.10079E+02
0.287	0.67397E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 52

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P<sub>SIM</sub>)-LOG(P<sub>SIP</sub>))) = 0.52424E+01

SOIL HORIZON NUMBER 53 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.45 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.123	0.150E+05
0.159	0.600E+04
0.203	0.200E+04
0.315	0.100E+04
0.331	0.330E+03
0.337	0.100E+03
0.368	0.600E+02
0.397	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	8.5	0.085
2.00	12.4	0.039
3.00	15.2	0.028
4.00	18.0	0.027
5.00	20.0	0.020
6.00	22.4	0.024
7.00	26.9	0.045
8.00	28.4	0.015
9.00	30.0	0.016
10.00	33.0	0.030
20.00	43.7	0.107
30.00	51.3	0.076
40.00	68.4	0.171
50.00	74.0	0.056
60.00	77.7	0.037
70.00	79.3	0.016
80.00	80.0	0.007
90.00	82.2	0.022
100.00	83.3	0.011
200.00	88.8	0.055
300.00	91.5	0.027
400.00	93.6	0.021
500.00	95.2	0.016
600.00	96.4	0.012
700.00	97.3	0.009
800.00	97.9	0.007
900.00	98.4	0.005
1000.00	98.8	0.004
2000.00	100.0	0.012

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.028	0.20189E+06
0.069	0.85448E+06
0.075	0.49944E+06
0.087	0.33156E+06
0.088	0.33156E+06
0.108	0.18044E+06
0.117	0.14211E+06
0.126	0.11523E+06
0.134	0.95601E+05
0.168	0.68712E+05
0.229	0.30979E+05
0.285	0.17547E+05
0.323	0.10480E+05
0.343	0.67094E+04
0.354	0.48785E+04
0.363	0.36907E+04
0.369	0.28727E+04
0.374	0.22327E+04
0.389	0.15608E+04
0.408	0.62599E+03
0.419	0.34416E+03
0.428	0.21080E+03
0.434	0.15205E+03
0.438	0.11038E+03
0.442	0.83528E+02
0.445	0.60154E+02
0.447	0.51987E+02
0.450	0.31540E+02

ALPHA = 1.38



SOIL HORIZON NUMBER 54 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.60 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT.

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.078	0.150E+05
0.102	0.600E+04
0.154	0.200E+04
0.312	0.100E+04
0.331	0.330E+03
0.349	0.100E+03
0.363	0.600E+02
0.392	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

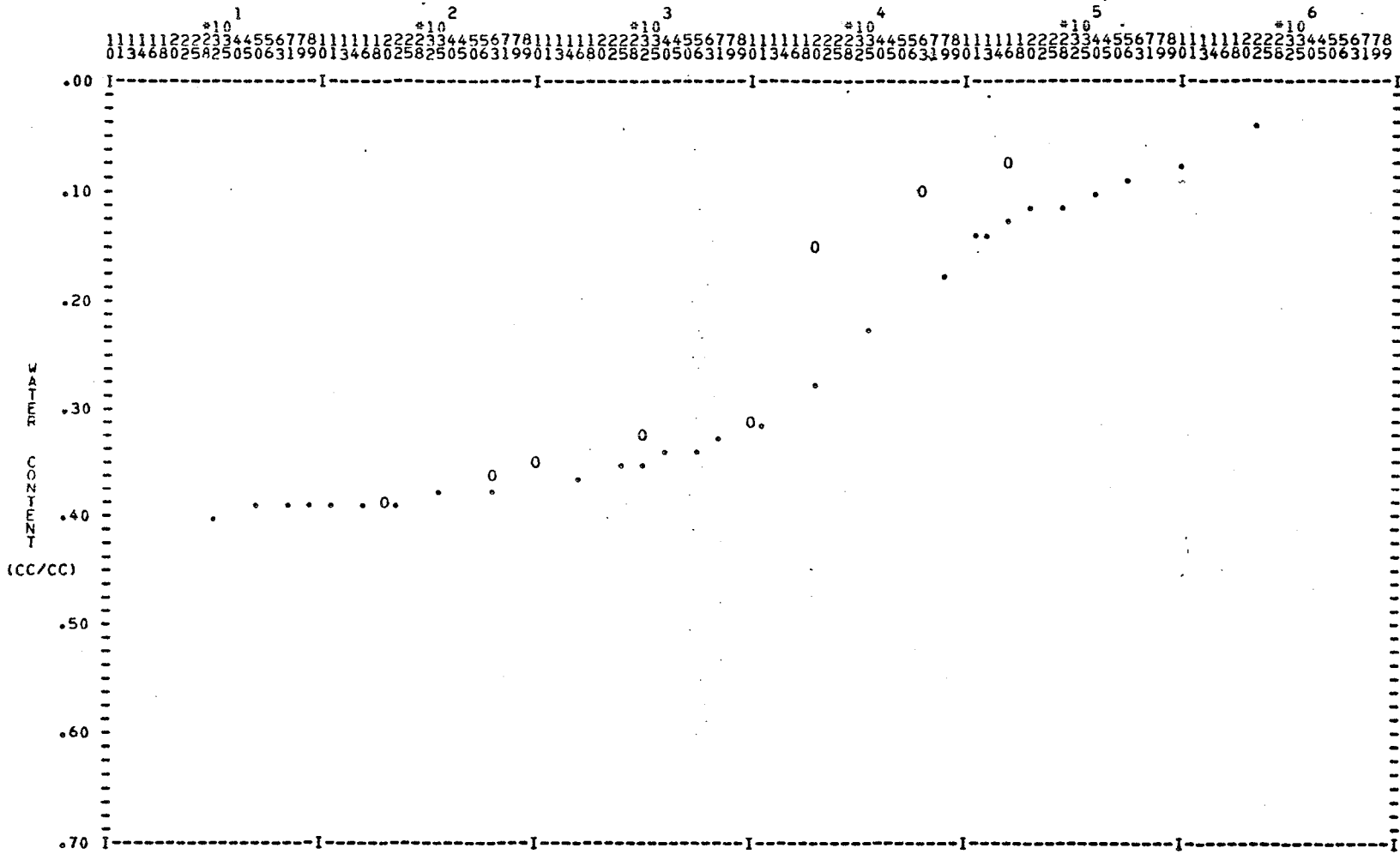
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	12.1	0.121
2.00	16.6	0.045
3.00	19.9	0.033
4.00	23.0	0.031
5.00	25.7	0.028
6.00	28.3	0.025
7.00	30.6	0.023
8.00	32.7	0.021
9.00	34.7	0.020
10.00	36.6	0.019
20.00	50.5	0.139
30.00	64.3	0.138
40.00	75.3	0.110
50.00	81.0	0.057
60.00	83.8	0.028
70.00	85.7	0.019
80.00	87.1	0.014
90.00	88.1	0.010
100.00	88.8	0.007
200.00	92.8	0.040
300.00	94.8	0.020
400.00	96.1	0.013
500.00	97.1	0.010
600.00	97.8	0.007
700.00	98.4	0.006
800.00	98.9	0.004
900.00	99.2	0.003
1000.00	99.4	0.002
2000.00	100.0	0.006

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.033	0.23372E+06
0.072	0.98605E+05
0.085	0.57419E+05
0.096	0.38005E+05
0.107	0.27240E+05
0.117	0.20606E+05
0.126	0.16206E+05
0.134	0.13126E+05
0.141	0.10878E+05
0.173	0.77879E+04
0.227	0.34861E+04
0.276	0.19690E+04
0.310	0.11727E+04
0.326	0.74463E+03
0.336	0.53634E+03
0.342	0.40205E+03
0.347	0.30993E+03
0.350	0.24349E+03
0.360	0.16515E+03
0.372	0.65060E+02
0.378	0.35550E+02
0.383	0.22583E+02
0.386	0.15650E+02
0.389	0.11443E+02
0.391	0.86629E+01
0.392	0.67150E+01
0.393	0.52807E+01
0.395	0.31048E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 54

0 MEASURED ;      • PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.36315E+01

SOIL HORIZON NUMBER 55 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.56 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.081	0.150E+05
0.108	0.600E+04
0.162	0.200E+04
0.340	0.100E+04
0.362	0.330E+03
0.373	0.100E+03
0.385	0.600E+02
0.417	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	20.5	0.205
2.00	24.0	0.035
3.00	26.6	0.026
4.00	29.1	0.025
5.00	31.4	0.023
6.00	33.5	0.021
7.00	35.5	0.020
8.00	37.3	0.018
9.00	39.1	0.017
10.00	40.7	0.016
20.00	53.0	0.123
30.00	65.9	0.129
40.00	76.5	0.106
50.00	82.2	0.057
60.00	85.1	0.029
70.00	87.1	0.021
80.00	88.6	0.015
90.00	89.7	0.011
100.00	90.4	0.007
200.00	94.3	0.039
300.00	96.1	0.018
400.00	97.2	0.011
500.00	98.0	0.008
600.00	98.6	0.006
700.00	99.1	0.005
800.00	99.5	0.003
900.00	99.7	0.002
1000.00	99.8	0.001
2000.00	100.0	0.002

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.049	0.21540E+06
0.104	0.91338E+05
0.114	0.53508E+05
0.124	0.35542E+05
0.134	0.25538E+05
0.142	0.19357E+05
0.150	0.15248E+05
0.157	0.12367E+05
0.164	0.10261E+05
0.193	0.73779E+04
0.245	0.33377E+04
0.293	0.18949E+04
0.326	0.11347E+04
0.344	0.72722E+03
0.354	0.52567E+03
0.361	0.39445E+03
0.367	0.30352E+03
0.370	0.23709E+03
0.380	0.15938E+03
0.391	0.61590E+02
0.397	0.33405E+02
0.401	0.21071E+02
0.404	0.14625E+02
0.407	0.10739E+02
0.408	0.80626E+01
0.410	0.61033E+01
0.410	0.45378E+01
0.411	0.24421E+01

ALPHA = 1.38





SOIL HORIZON NUMBER 56 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.67 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.162	0.150E+05
0.195	0.600E+04
0.247	0.200E+04
0.314	0.100E+04
0.341	0.330E+03
0.351	0.100E+03
0.362	0.600E+02
0.381	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	13.0	0.130
2.00	15.4	0.024
3.00	17.2	0.018
4.00	18.1	0.009
5.00	18.8	0.007
6.00	19.3	0.005
7.00	19.7	0.004
8.00	20.0	0.003
9.00	20.2	0.002
10.00	20.4	0.002
20.00	22.5	0.021
30.00	24.4	0.019
40.00	25.5	0.011
50.00	26.0	0.005
60.00	26.3	0.003
70.00	26.5	0.002
80.00	26.6	0.001
90.00	26.7	0.001
100.00	26.8	0.001
200.00	28.1	0.013
300.00	29.2	0.011
400.00	29.8	0.006
500.00	30.1	0.003
600.00	30.3	0.002
700.00	30.5	0.002
800.00	30.7	0.002
900.00	30.8	0.001
1000.00	30.9	0.001
2000.00	100.0	0.010

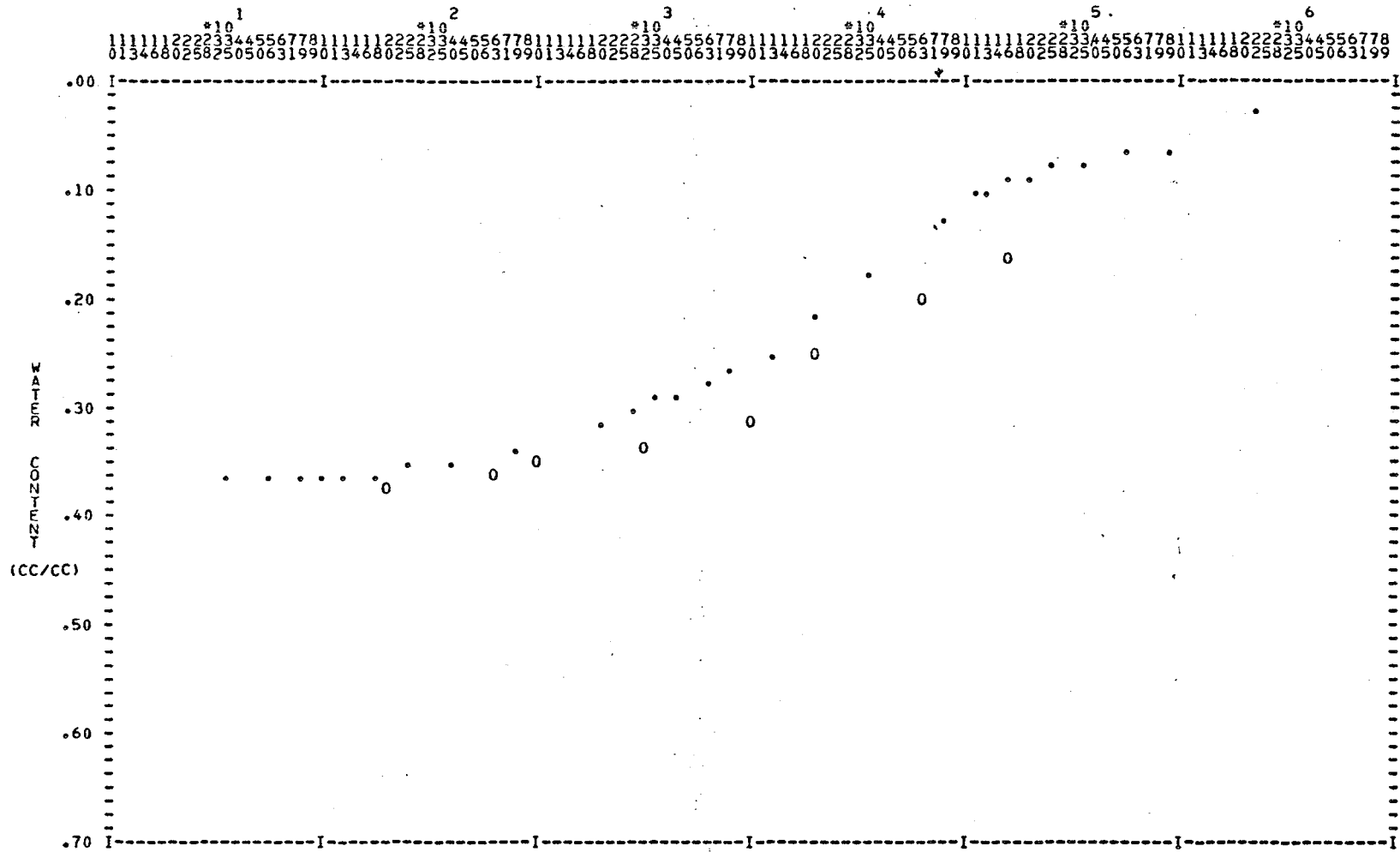
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.028	0.21989E+06
0.030	0.93318E+06
0.037	0.55013E+06
0.044	0.36798E+06
0.050	0.26605E+06
0.058	0.20273E+06
0.066	0.16044E+06
0.074	0.13065E+06
0.083	0.10880E+06
0.093	0.79284E+04
0.103	0.36220E+04
0.114	0.20685E+04
0.126	0.12599E+04
0.133	0.81122E+03
0.144	0.61122E+03
0.153	0.46573E+03
0.164	0.36442E+03
0.174	0.29061E+03
0.184	0.19706E+03
0.194	0.76530E+02
0.204	0.41313E+02
0.214	0.25847E+02
0.224	0.17697E+02
0.234	0.12889E+02
0.244	0.97314E+01
0.254	0.75303E+01
0.264	0.59165E+01
0.268	0.36180E+01

ALPHA = 1.38

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SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 56

0 MEASURED ;      • PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.40116E+01

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SOIL HORIZON NUMBER 57 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.83 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.093	0.150E+05
0.099	0.600E+04
0.110	0.200E+04
0.167	0.100E+04
0.198	0.330E+03
0.229	0.100E+03
0.238	0.600E+02
0.276	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	7.0	0.070
2.00	8.1	0.011
3.00	8.8	0.007
4.00	9.6	0.007
5.00	10.3	0.008
6.00	11.2	0.008
7.00	12.0	0.008
8.00	12.8	0.008
9.00	13.7	0.008
10.00	14.5	0.008
20.00	22.5	0.081
30.00	32.3	0.097
40.00	40.7	0.084
50.00	46.1	0.054
60.00	49.5	0.034
70.00	52.2	0.027
80.00	54.5	0.024
90.00	56.7	0.022
100.00	58.8	0.021
200.00	74.2	0.154
300.00	82.7	0.086
400.00	88.2	0.054
500.00	91.5	0.037
600.00	94.5	0.026
700.00	96.2	0.017
800.00	97.3	0.011
900.00	98.0	0.007
1000.00	98.5	0.005
2000.00	100.0	0.015

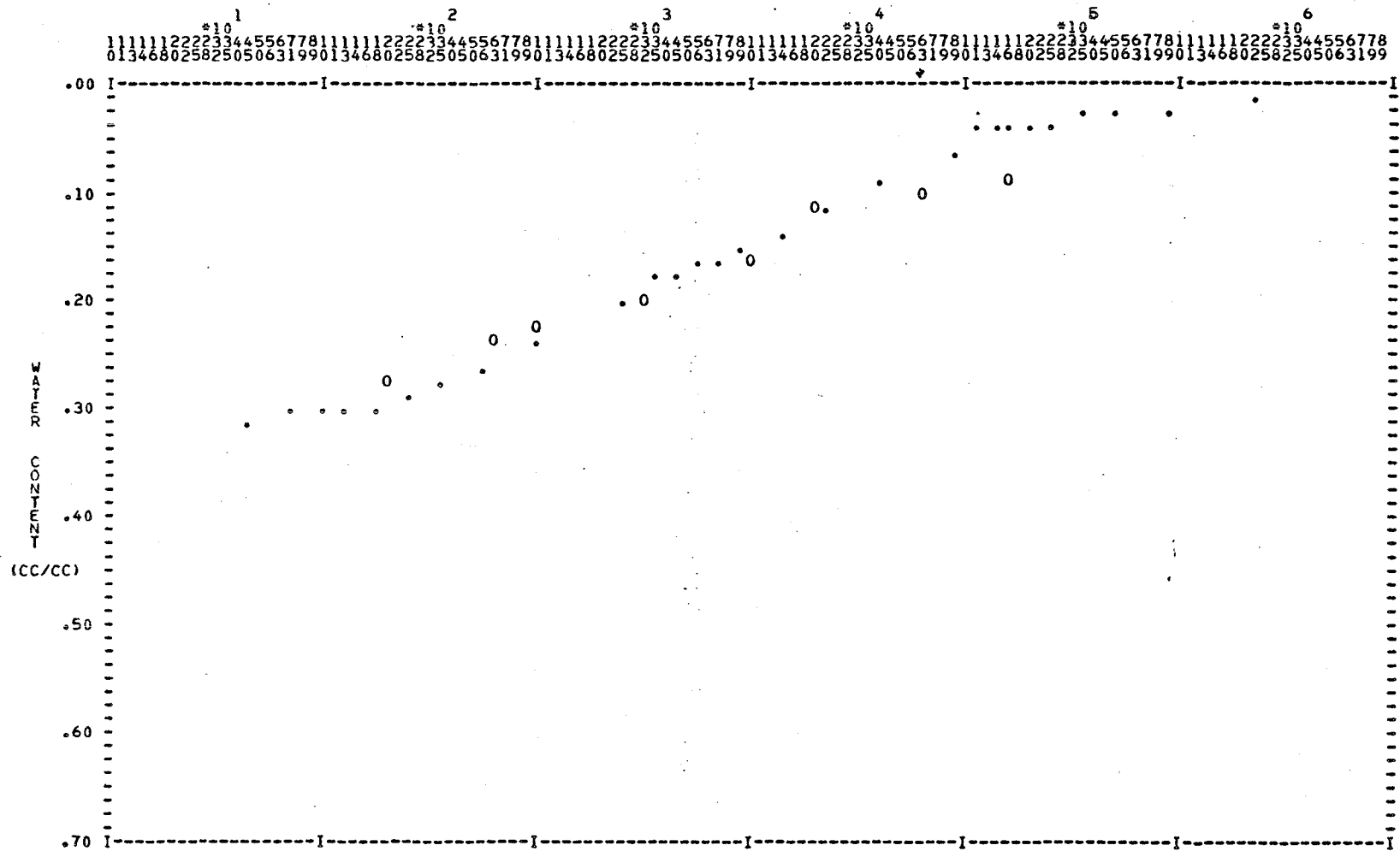
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.013	0.21572E+06
0.026	0.89616E+05
0.028	0.52965E+05
0.031	0.36087E+05
0.033	0.26543E+05
0.036	0.20517E+05
0.038	0.16438E+05
0.041	0.13512E+05
0.044	0.11346E+05
0.057	0.84997E+04
0.085	0.39466E+04
0.113	0.22660E+04
0.134	0.14011E+04
0.148	0.93614E+03
0.157	0.69002E+03
0.165	0.53733E+03
0.172	0.43533E+03
0.179	0.36368E+03
0.206	0.25850E+03
0.243	0.10377E+03
0.264	0.56088E+02
0.279	0.35217E+02
0.288	0.23911E+02
0.295	0.17014E+02
0.299	0.12585E+02
0.302	0.95490E+01
0.304	0.73447E+01
0.307	0.44720E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ) . -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 57

0 MEASURED ;      . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.21196E+01

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SOIL HORIZON NUMBER 58 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.41 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.079	0.150E+05
0.113	0.600E+04
0.166	0.200E+04
0.248	0.100E+04
0.268	0.330E+03
0.283	0.100E+03
0.302	0.600E+02
0.338	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

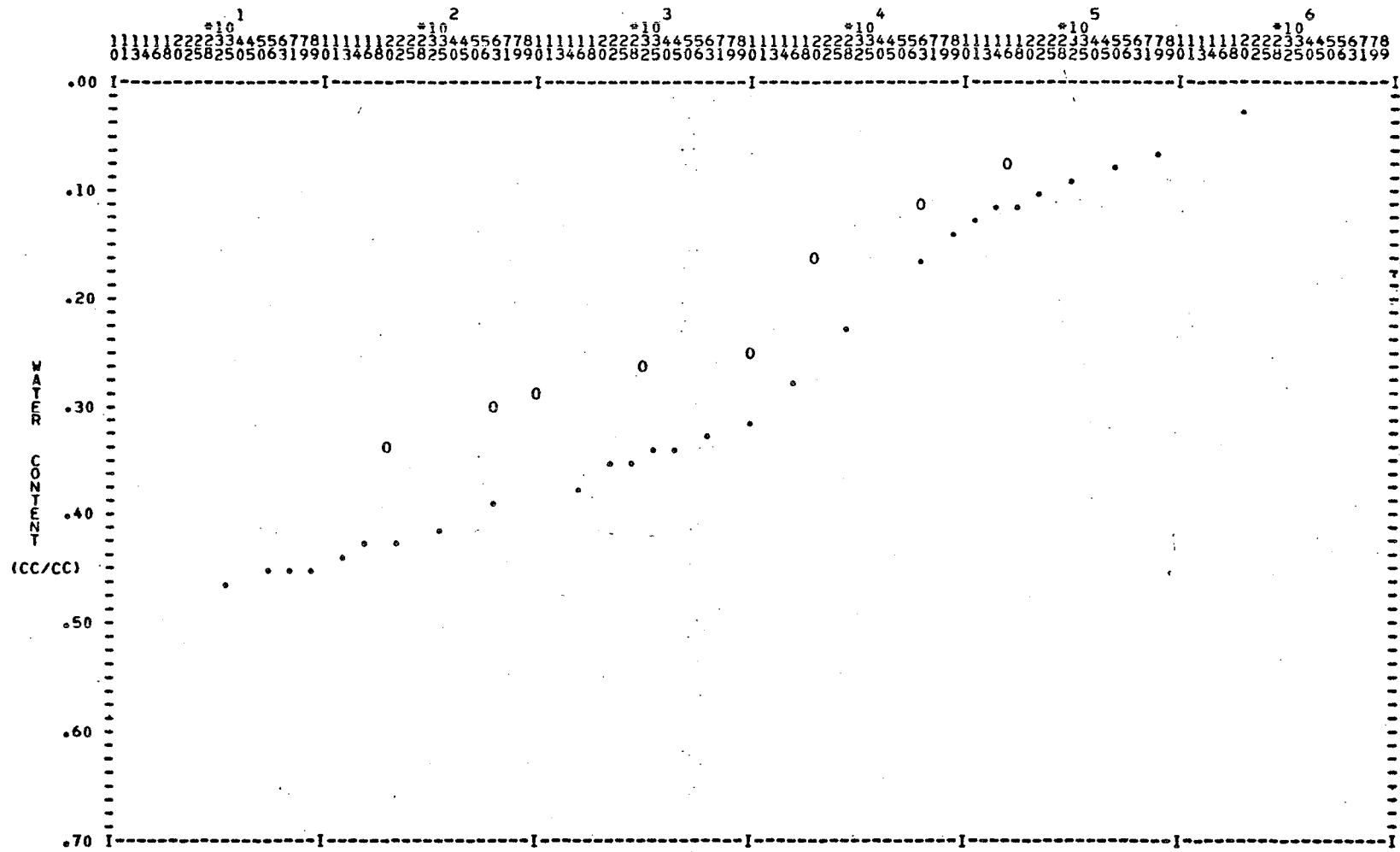
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	9.4	0.094
2.00	12.9	0.035
3.00	15.5	0.026
4.00	18.0	0.025
5.00	20.3	0.023
6.00	22.4	0.021
7.00	24.3	0.019
8.00	26.1	0.018
9.00	27.8	0.017
10.00	29.3	0.016
20.00	41.2	0.119
30.00	53.6	0.124
40.00	63.6	0.099
50.00	68.4	0.048
60.00	70.6	0.022
70.00	72.3	0.017
80.00	73.7	0.014
90.00	74.8	0.012
100.00	75.8	0.010
200.00	82.0	0.062
300.00	85.9	0.040
400.00	88.9	0.030
500.00	91.2	0.023
600.00	93.0	0.018
700.00	94.6	0.015
800.00	95.8	0.013
900.00	96.9	0.011
1000.00	97.8	0.009
2000.00	100.0	0.022

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.030	0.19265E+06
0.066	0.81536E+05
0.078	0.47654E+05
0.090	0.31610E+05
0.100	0.22690E+05
0.109	0.17185E+05
0.118	0.13526E+05
0.126	0.10906E+05
0.134	0.90948E+04
0.165	0.65282E+04
0.222	0.29536E+04
0.274	0.16681E+04
0.309	0.98093E+03
0.325	0.61416E+03
0.334	0.45163E+03
0.341	0.34700E+03
0.347	0.27551E+03
0.352	0.22440E+03
0.369	0.15520E+03
0.393	0.63394E+02
0.409	0.35711E+02
0.421	0.22908E+02
0.431	0.16030E+02
0.439	0.11893E+02
0.445	0.91808E+01
0.451	0.73009E+01
0.456	0.59417E+01
0.463	0.34331E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



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SOIL HORIZON NUMBER 59 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.54 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.114	0.150E+05
0.157	0.600E+04
0.219	0.200E+04
0.299	0.100E+04
0.311	0.330E+03
0.320	0.100E+03
0.330	0.600E+02
0.343	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	14.7	0.147
2.00	20.1	0.054
3.00	23.8	0.037
4.00	27.1	0.033
5.00	30.0	0.029
6.00	32.5	0.026
7.00	34.9	0.023
8.00	37.0	0.021
9.00	38.9	0.019
10.00	40.7	0.018
20.00	53.6	0.129
30.00	65.3	0.117
40.00	74.1	0.089
50.00	78.5	0.044
60.00	80.4	0.019
70.00	81.8	0.014
80.00	82.9	0.011
90.00	83.7	0.008
100.00	84.4	0.007
200.00	88.5	0.041
300.00	91.1	0.026
400.00	93.0	0.019
500.00	94.4	0.014
600.00	95.5	0.011
700.00	96.4	0.009
800.00	97.2	0.007
900.00	97.8	0.006
1000.00	98.3	0.005
2000.00	100.0	0.017

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.042	0.23064E+06
0.092	0.96364E+05
0.107	0.55472E+05
0.120	0.36488E+05
0.131	0.26042E+05
0.141	0.19638E+05
0.150	0.15406E+05
0.159	0.12451E+05
0.167	0.10301E+05
0.197	0.73292E+04
0.249	0.32235E+04
0.292	0.18032E+04
0.320	0.10627E+04
0.333	0.66497E+03
0.340	0.48063E+03
0.345	0.36393E+03
0.349	0.28546E+03
0.352	0.23023E+03
0.362	0.15870E+03
0.376	0.65019E+02
0.385	0.36163E+02
0.392	0.23174E+02
0.398	0.16142E+02
0.402	0.11894E+02
0.405	0.91452E+01
0.408	0.72589E+01
0.411	0.59059E+01
0.415	0.36109E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 60 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.51 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.146	0.150E+05
0.183	0.600E+04
0.234	0.200E+04
0.310	0.100E+04
0.316	0.330E+03
0.325	0.100E+03
0.334	0.600E+02
0.349	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	19.4	0.194
2.00	23.6	0.042
3.00	26.6	0.030
4.00	29.2	0.027
5.00	31.6	0.024
6.00	33.8	0.022
7.00	35.7	0.020
8.00	37.5	0.018
9.00	39.2	0.017
10.00	40.7	0.015
20.00	52.1	0.114
30.00	62.8	0.107
40.00	71.1	0.083
50.00	75.3	0.042
60.00	77.3	0.020
70.00	78.8	0.015
80.00	80.0	0.012
90.00	80.9	0.010
100.00	81.7	0.008
200.00	86.7	0.050
300.00	89.7	0.030
400.00	91.8	0.022
500.00	93.5	0.017
600.00	94.8	0.013
700.00	95.8	0.010
800.00	96.6	0.008
900.00	97.2	0.007
1000.00	97.8	0.006
2000.00	100.0	0.022

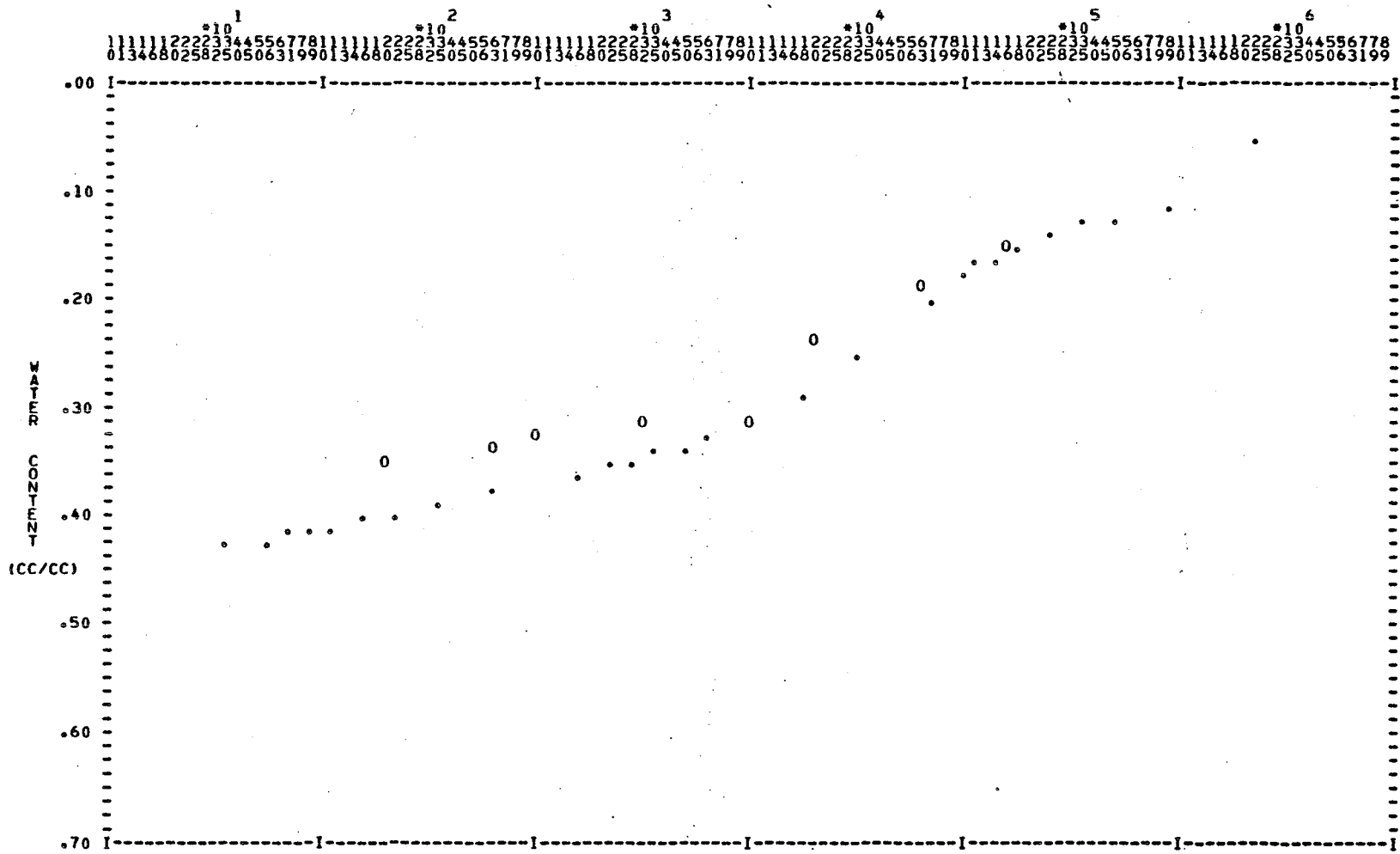
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.051	0.21489E+06
0.108	0.90130E+05
0.120	0.52143E+05
0.131	0.34402E+05
0.141	0.24608E+05
0.149	0.18588E+05
0.158	0.14603E+05
0.165	0.11817E+05
0.172	0.97867E+04
0.200	0.69910E+04
0.247	0.30995E+04
0.288	0.17401E+04
0.315	0.10293E+04
0.328	0.65433E+03
0.336	0.47997E+03
0.341	0.36332E+03
0.346	0.28897E+03
0.350	0.23226E+03
0.362	0.16073E+03
0.379	0.65437E+02
0.390	0.36331E+02
0.399	0.23225E+02
0.405	0.16150E+02
0.410	0.11828E+02
0.414	0.90710E+01
0.417	0.72016E+01
0.419	0.58742E+01
0.425	0.37053E+01

ALPHA = 1.38

B-120

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 60

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.40099E+01

B-121

SOIL HORIZON NUMBER 61 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.69 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.135	0.150E+05
0.164	0.600E+04
0.223	0.200E+04
0.287	0.100E+04
0.304	0.330E+03
0.304	0.100E+03
0.331	0.600E+02
0.345	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

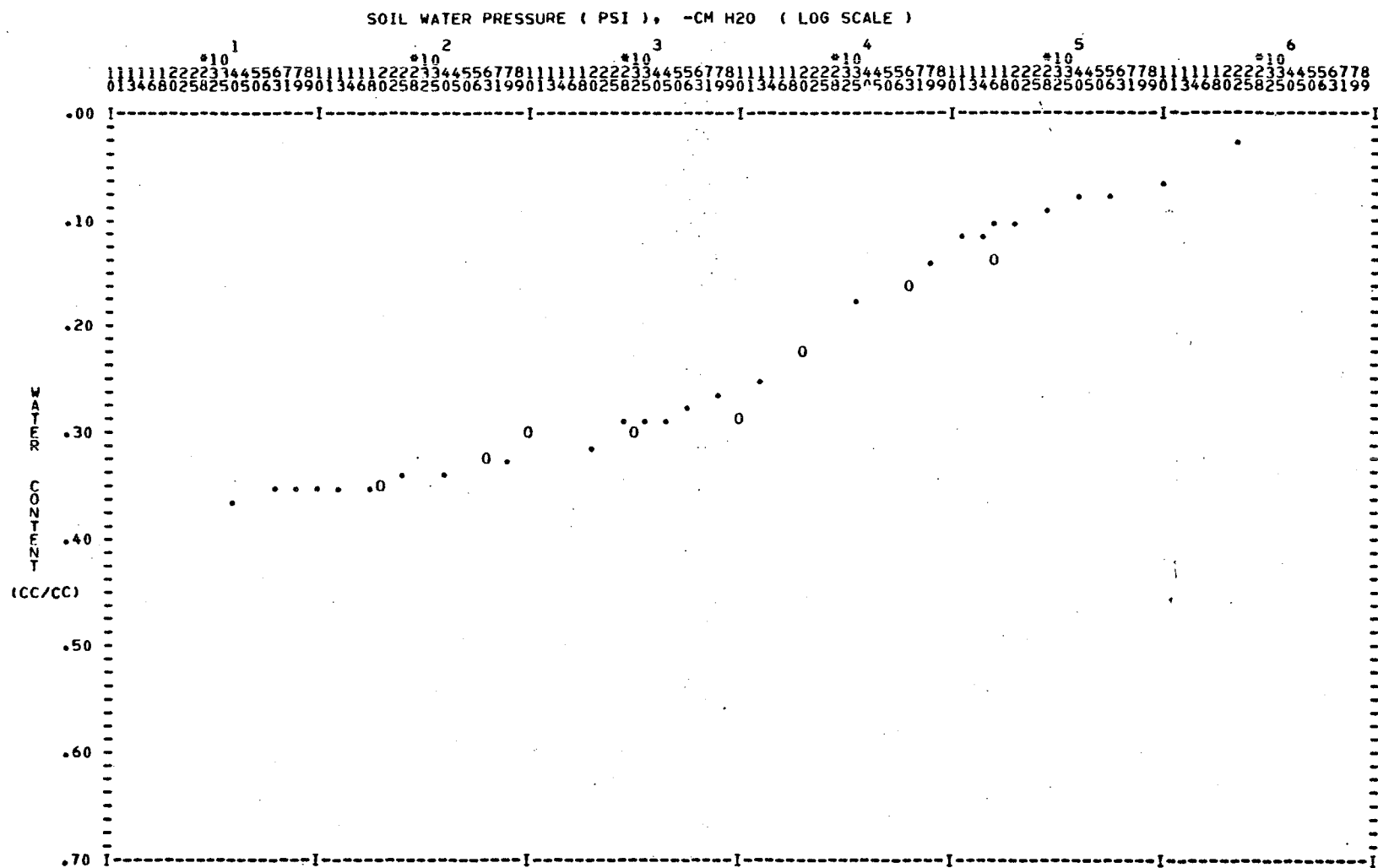
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	13.9	0.139
2.00	16.9	0.030
3.00	19.2	0.023
4.00	21.4	0.022
5.00	23.4	0.021
6.00	25.3	0.019
7.00	27.1	0.018
8.00	28.8	0.017
9.00	30.4	0.016
10.00	31.9	0.015
20.00	43.6	0.117
30.00	56.0	0.124
40.00	66.2	0.102
50.00	71.8	0.056
60.00	74.8	0.030
70.00	77.1	0.023
80.00	78.9	0.018
90.00	80.3	0.014
100.00	81.4	0.011
200.00	87.8	0.064
300.00	91.1	0.033
400.00	93.3	0.021
500.00	94.8	0.015
600.00	95.5	0.011
700.00	96.8	0.009
800.00	97.5	0.007
900.00	98.0	0.005
1000.00	98.4	0.004
2000.00	100.0	0.016

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.031	0.23301E+06
0.065	0.98773E+05
0.073	0.57943E+05
0.081	0.38568E+05
0.088	0.27605E+05
0.095	0.21075E+05
0.101	0.16626E+05
0.107	0.13508E+05
0.113	0.11217E+05
0.119	0.91024E+04
0.125	0.76724E+04
0.130	0.60865E+04
0.137	0.48552E+04
0.143	0.38408E+04
0.150	0.30555E+04
0.156	0.25327E+04
0.163	0.21550E+04
0.169	0.18417E+04
0.175	0.15946E+04
0.183	0.13762E+04
0.190	0.11758E+04
0.197	0.10049E+04
0.205	0.88188E+03
0.212	0.73268E+03
0.220	0.60102E+03
0.228	0.49408E+03
0.236	0.40968E+03
0.244	0.33968E+03
0.252	0.28206E+03

ALPHA = 1.38

B-123



SOIL HORIZON NUMBER 61

0 MEASURED ;

• PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.13950E+01

SOIL HORIZON NUMBER 62 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.65 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.134	0.150E+05
0.163	0.600E+04
0.233	0.200E+04
0.300	0.100E+04
0.313	0.330E+03
0.322	0.100E+03
0.332	0.600E+02
0.345	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	12.8	0.128
2.00	16.5	0.037
3.00	19.2	0.027
4.00	21.7	0.026
5.00	24.1	0.024
6.00	26.3	0.022
7.00	28.3	0.020
8.00	30.1	0.019
9.00	31.9	0.017
10.00	33.5	0.016
20.00	46.2	0.127
30.00	59.0	0.128
40.00	69.3	0.104
50.00	75.1	0.058
60.00	78.2	0.031
70.00	80.6	0.023
80.00	82.3	0.018
90.00	83.6	0.013
100.00	84.6	0.010
200.00	90.1	0.055
300.00	92.7	0.026
400.00	94.5	0.017
500.00	95.7	0.012
600.00	96.6	0.009
700.00	97.4	0.007
800.00	98.0	0.006
900.00	98.4	0.005
1000.00	98.8	0.004
2000.00	100.0	0.012

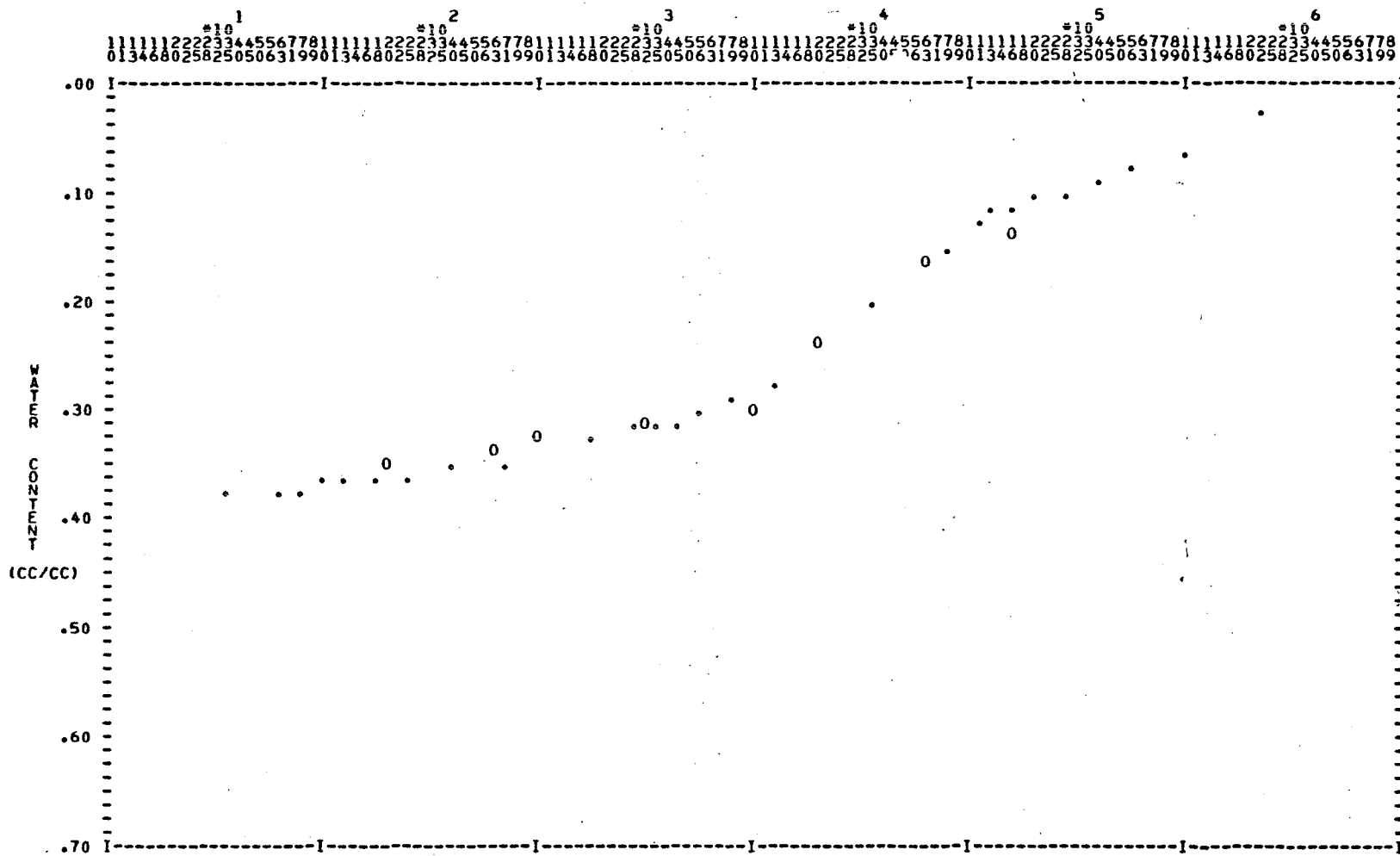
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.031	0.23371E+06
0.067	0.98743E+05
0.077	0.57676E+05
0.086	0.38292E+05
0.095	0.27504E+05
0.103	0.20849E+05
0.110	0.16428E+05
0.117	0.13327E+05
0.123	0.11061E+05
0.150	0.79639E+04
0.198	0.35754E+04
0.242	0.20264E+04
0.273	0.12217E+04
0.289	0.79370E+03
0.300	0.57778E+03
0.307	0.43706E+03
0.313	0.33975E+03
0.317	0.26916E+03
0.330	0.18234E+03
0.345	0.71338E+02
0.353	0.38740E+02
0.359	0.24580E+02
0.363	0.17025E+02
0.366	0.12501E+02
0.369	0.95451E+01
0.371	0.75001E+01
0.372	0.60214E+01
0.375	0.36856E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 62

0 MEASURED : . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.18826E+01

B-125

SOIL HORIZON NUMBER 63 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.78 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.041	0.150E+05
0.048	0.600E+04
0.068	0.200E+04
0.119	0.100E+04
0.132	0.330E+03
0.150	0.100E+03
0.167	0.600E+02
0.230	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	3.5	0.035
2.00	4.1	0.006
3.00	4.6	0.005
4.00	5.2	0.006
5.00	5.7	0.006
6.00	6.2	0.005
7.00	6.8	0.005
8.00	7.3	0.005
9.00	7.7	0.005
10.00	8.2	0.005
20.00	11.9	0.037
30.00	16.1	0.042
40.00	20.7	0.046
50.00	25.0	0.043
60.00	28.8	0.038
70.00	32.3	0.035
80.00	35.5	0.032
90.00	38.5	0.030
100.00	41.3	0.028
200.00	62.3	0.210
300.00	73.7	0.113
400.00	80.6	0.070
500.00	85.5	0.049
600.00	89.0	0.035
700.00	91.6	0.026
800.00	93.5	0.019
900.00	94.9	0.014
1000.00	96.0	0.011
2000.00	100.0	0.040

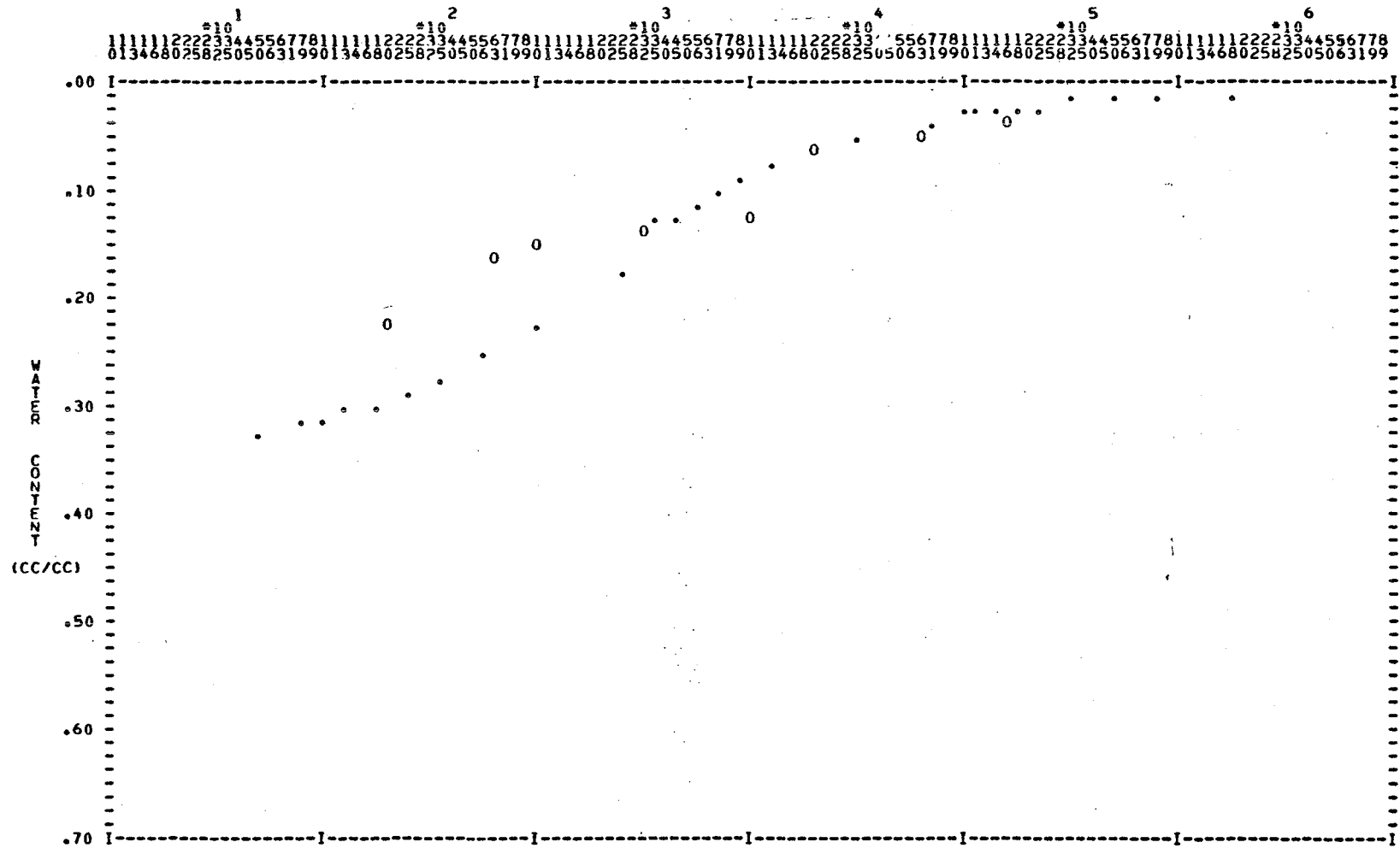
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.001	0.18235E+06
0.014	0.79715E+05
0.016	0.48106E+05
0.018	0.32425E+05
0.020	0.23520E+05
0.021	0.17950E+05
0.023	0.14217E+05
0.025	0.11581E+05
0.026	0.96449E+04
0.033	0.70212E+04
0.046	0.32250E+04
0.060	0.19361E+04
0.075	0.12842E+04
0.088	0.91744E+03
0.100	0.69334E+03
0.111	0.54566E+03
0.121	0.44261E+03
0.131	0.36752E+03
0.170	0.26270E+03
0.223	0.10477E+03
0.253	0.56393E+02
0.273	0.35437E+02
0.286	0.24310E+02
0.296	0.17615E+02
0.304	0.13307E+02
0.309	0.10362E+02
0.313	0.82547E+01
0.322	0.51590E+01

ALPHA = 1.38



SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 63

O MEASURED • PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.31276E+01

SOIL HORIZON NUMBER 64 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.31 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.066	0.150E+05
0.072	0.600E+04
0.088	0.200E+04
0.119	0.100E+04
0.144	0.330E+03
0.164	0.100E+03
0.198	0.600E+02
0.406	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

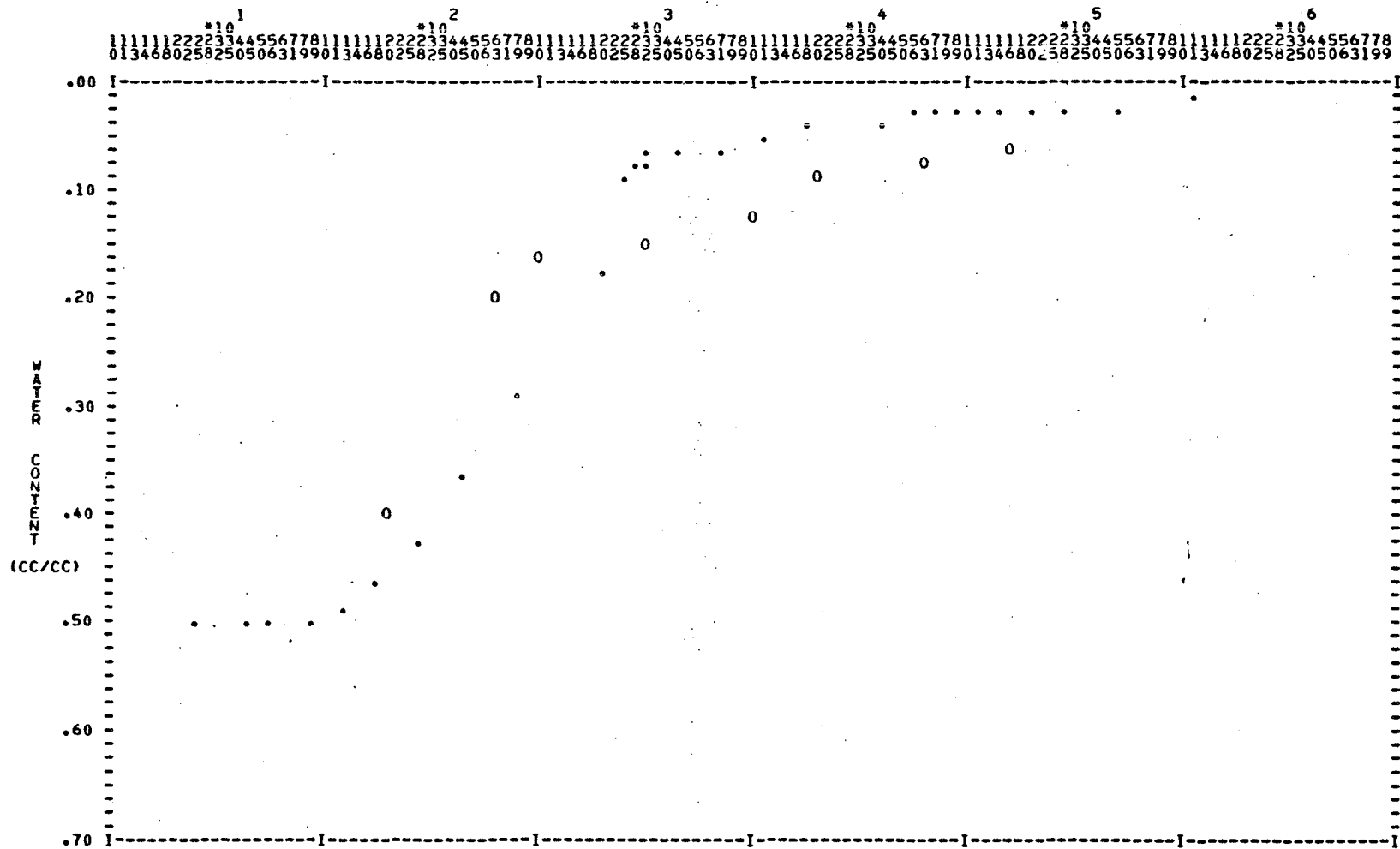
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	3.7	0.037
2.00	4.0	0.003
3.00	4.3	0.003
4.00	4.6	0.003
5.00	4.8	0.003
6.00	5.1	0.003
7.00	5.4	0.003
8.00	5.6	0.002
9.00	5.8	0.002
10.00	6.0	0.002
20.00	7.5	0.015
30.00	9.2	0.017
40.00	11.0	0.018
50.00	12.4	0.014
60.00	12.9	0.005
70.00	13.2	0.003
80.00	14.5	0.011
90.00	16.5	0.020
100.00	19.8	0.033
200.00	49.0	0.292
300.00	66.5	0.175
400.00	78.9	0.123
500.00	88.4	0.095
600.00	94.3	0.059
700.00	97.1	0.028
800.00	98.4	0.013
900.00	99.0	0.005
1000.00	99.2	0.002
2000.00	100.0	0.008

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.010	0.11220E+06
0.021	0.49137E+05
0.022	0.29480E+05
0.024	0.19720E+05
0.025	0.14206E+05
0.026	0.10776E+05
0.028	0.84885E+04
0.029	0.68814E+04
0.030	0.57058E+04
0.034	0.40837E+04
0.042	0.18834E+04
0.051	0.11155E+04
0.059	0.71757E+03
0.064	0.42152E+03
0.066	0.30435E+03
0.069	0.30748E+03
0.078	0.28805E+03
0.092	0.26211E+03
0.174	0.19326E+03
0.292	0.78634E+02
0.368	0.43476E+02
0.423	0.27922E+02
0.462	0.18567E+02
0.484	0.12400E+02
0.494	0.86524E+01
0.499	0.59507E+01
0.501	0.42644E+01
0.504	0.26266E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



B-129

SOIL HORIZON NUMBER 65 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.47 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.019	0.150E+05
0.032	0.600E+04
0.041	0.200E+04
0.072	0.100E+04
0.090	0.330E+03
0.107	0.100E+03
0.140	0.600E+02
0.365	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	3.3	0.033
2.00	3.4	0.001
3.00	3.6	0.002
4.00	3.7	0.002
5.00	3.9	0.002
6.00	4.1	0.002
7.00	4.2	0.002
8.00	4.4	0.001
9.00	4.5	0.001
10.00	4.6	0.001
20.00	5.4	0.008
30.00	6.6	0.011
40.00	8.1	0.015
50.00	9.3	0.011
60.00	10.4	0.011
70.00	11.3	0.009
80.00	13.9	0.027
90.00	16.6	0.027
100.00	19.9	0.033
200.00	35.5	0.156
300.00	53.7	0.182
400.00	61.8	0.081
500.00	70.0	0.082
600.00	74.8	0.048
700.00	77.3	0.025
800.00	78.6	0.013
900.00	79.2	0.006
1000.00	79.4	0.002
2000.00	100.0	0.006

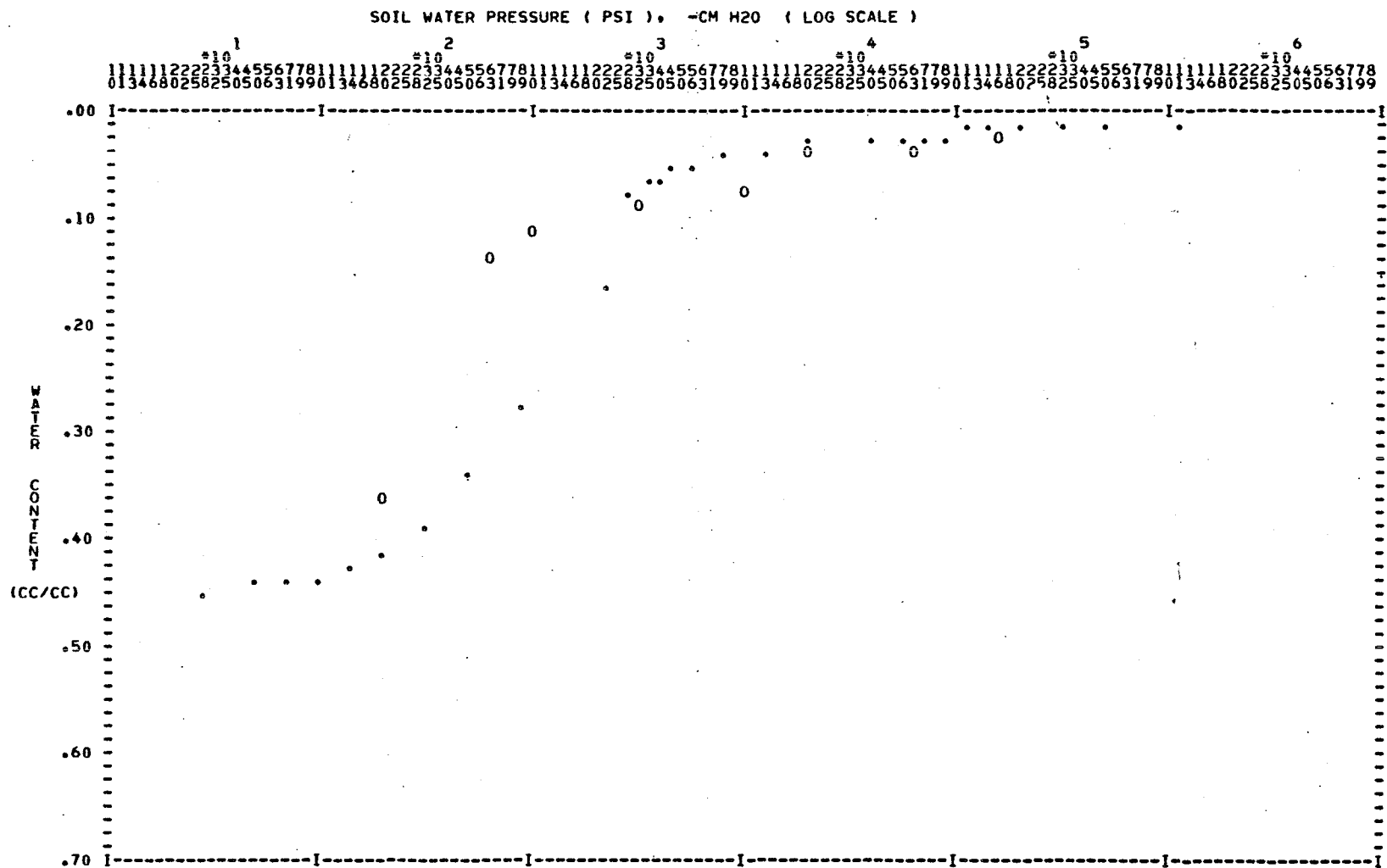
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.008	0.10761E+06
0.015	0.49625E+05
0.016	0.30458E+05
0.017	0.20418E+05
0.018	0.14680E+05
0.019	0.11099E+05
0.019	0.87104E+04
0.020	0.70334E+04
0.020	0.58085E+04
0.022	0.40771E+04
0.027	0.19883E+04
0.033	0.12134E+04
0.039	0.79027E+03
0.044	0.56215E+03
0.049	0.45776E+03
0.057	0.39131E+03
0.068	0.33884E+03
0.081	0.29588E+03
0.081	0.22159E+03
0.159	0.89427E+02
0.270	0.48806E+02
0.337	0.30528E+02
0.383	0.20159E+02
0.412	0.13682E+02
0.428	0.95900E+01
0.436	0.68158E+01
0.440	0.48051E+01
0.442	0.28073E+01
0.444	

ALPHA = 1.38

B-130

B-131



SOIL HORIZON NUMBER 66 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.53 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.032	0.150E+05
0.046	0.600E+04
0.052	0.200E+04
0.095	0.100E+04
0.106	0.330E+03
0.139	0.100E+03
0.164	0.600E+02
0.375	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

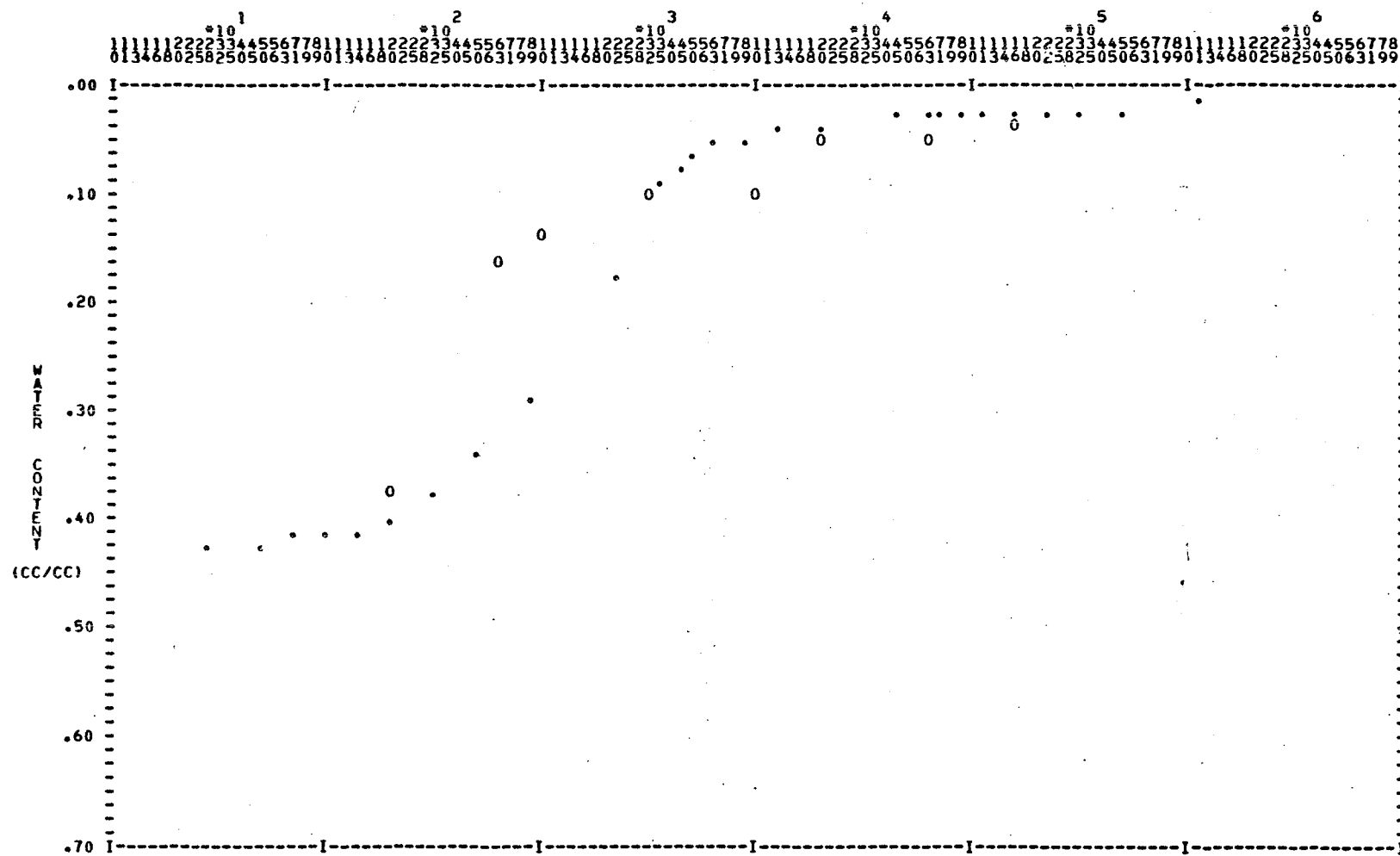
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	5.5	0.055
2.00	5.6	0.001
3.00	5.8	0.002
4.00	6.0	0.002
5.00	6.1	0.002
6.00	6.3	0.002
7.00	6.5	0.002
8.00	6.6	0.001
9.00	6.8	0.001
10.00	6.9	0.001
20.00	7.7	0.008
30.00	9.0	0.013
40.00	10.5	0.016
50.00	11.9	0.014
60.00	13.5	0.016
70.00	15.6	0.022
80.00	18.3	0.026
90.00	21.2	0.030
100.00	24.5	0.033
200.00	57.8	0.333
300.00	75.8	0.180
400.00	86.8	0.110
500.00	92.9	0.061
600.00	96.0	0.031
700.00	97.8	0.018
800.00	98.8	0.010
900.00	99.3	0.005
1000.00	99.5	0.002
2000.00	100.0	0.005

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.012	0.11388E+06
0.024	0.52584E+05
0.025	0.32276E+05
0.026	0.21629E+05
0.026	0.15543E+05
0.027	0.11746E+05
0.028	0.92134E+04
0.028	0.74360E+04
0.029	0.61381E+04
0.031	0.42987E+04
0.035	0.20996E+04
0.041	0.12881E+04
0.047	0.84440E+03
0.054	0.63310E+03
0.061	0.51786E+03
0.072	0.42927E+03
0.083	0.36140E+03
0.097	0.30869E+03
0.174	0.23428E+03
0.282	0.93455E+02
0.344	0.50173E+02
0.380	0.30267E+02
0.399	0.19440E+02
0.410	0.13428E+02
0.415	0.95911E+01
0.419	0.69392E+01
0.420	0.49095E+01
0.422	0.28397E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 66

O MEASURED ;

. PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.36929E+01

SOIL HORIZON NUMBER 67 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.51 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.039	0.150E+05
0.051	0.600E+04
0.059	0.200E+04
0.103	0.100E+04
0.113	0.330E+03
0.128	0.100E+03
0.151	0.600E+02
0.374	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	7.4	0.074
2.00	7.5	0.001
3.00	7.6	0.001
4.00	7.7	0.001
5.00	7.8	0.001
6.00	7.9	0.001
7.00	8.0	0.001
8.00	8.1	0.001
9.00	8.2	0.001
10.00	8.5	0.004
20.00	9.7	0.011
30.00	11.1	0.015
40.00	12.4	0.013
50.00	13.9	0.015
60.00	16.0	0.021
70.00	18.6	0.026
80.00	20.3	0.017
90.00	22.8	0.025
100.00	24.3	0.015
200.00	26.4	0.021
300.00	27.5	0.011
400.00	28.5	0.010
500.00	29.4	0.009
600.00	29.4	0.000
700.00	29.4	0.000
800.00	29.4	0.000
900.00	29.4	0.000
1000.00	29.6	0.002
2000.00	100.0	0.004

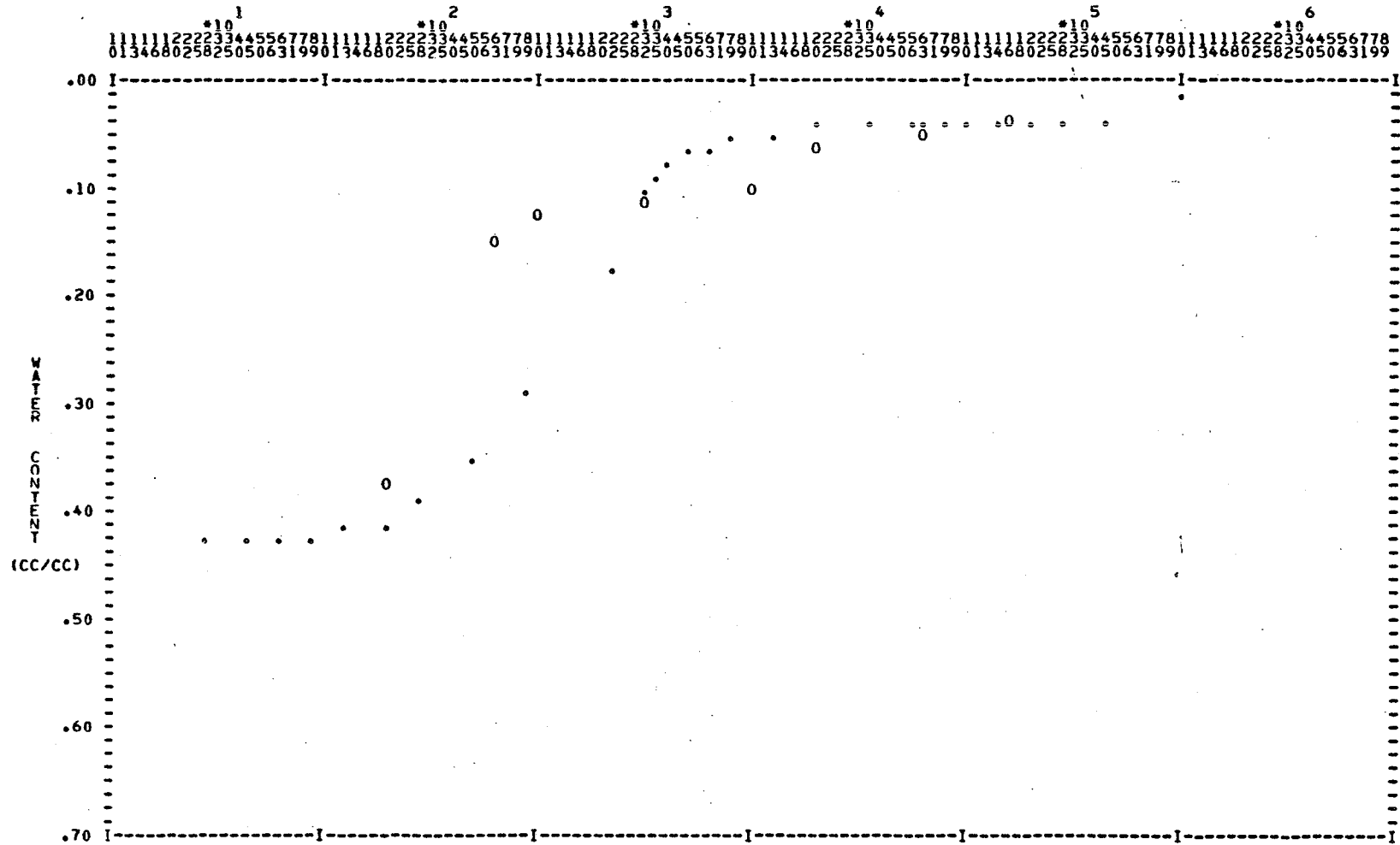
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.016	0.94712E+05
0.032	0.45149E+05
0.033	0.28047E+05
0.033	0.18848E+05
0.034	0.13560E+05
0.034	0.10252E+05
0.034	0.80428E+04
0.035	0.64913E+04
0.035	0.53578E+04
0.036	0.37474E+04
0.039	0.20055E+04
0.045	0.12500E+04
0.051	0.82014E+03
0.057	0.61709E+03
0.064	0.42070E+03
0.074	0.24205E+03
0.086	0.16337E+03
0.100	0.10310E+03
0.119	0.62144E+02
0.150	0.29455E+02
0.180	0.16699E+02
0.200	0.10922E+02
0.250	0.13022E+02
0.300	0.92674E+01
0.427	0.56698E+01
0.428	0.46762E+01
0.429	0.26801E+01

ALPHA = 1.38



SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 67,

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.41897E+01

SOIL HORIZON NUMBER 68 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.49 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.021	0.150E+05
0.027	0.600E+04
0.031	0.200E+04
0.031	0.100E+04
0.064	0.330E+03
0.074	0.100E+03
0.088	0.600E+02
0.107	0.200E+02
0.347	

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	2.4	0.024
2.00	1.7	0.003
4.00	0.9	0.002
6.00	0.5	0.001
8.00	0.4	0.001
10.00	0.3	0.001
20.00	0.2	0.001
30.00	0.1	0.002
40.00	0.1	0.001
50.00	0.1	0.001
60.00	0.1	0.001
70.00	0.1	0.006
80.00	0.1	0.014
90.00	0.1	0.023
100.00	11.8	0.031
200.00	49.0	0.372
300.00	70.6	0.215
400.00	84.6	0.140
500.00	92.2	0.082
600.00	96.7	0.039
700.00	98.5	0.018
800.00	99.2	0.007
900.00	99.5	0.003
1000.00	99.6	0.001
2000.00	100.0	0.004

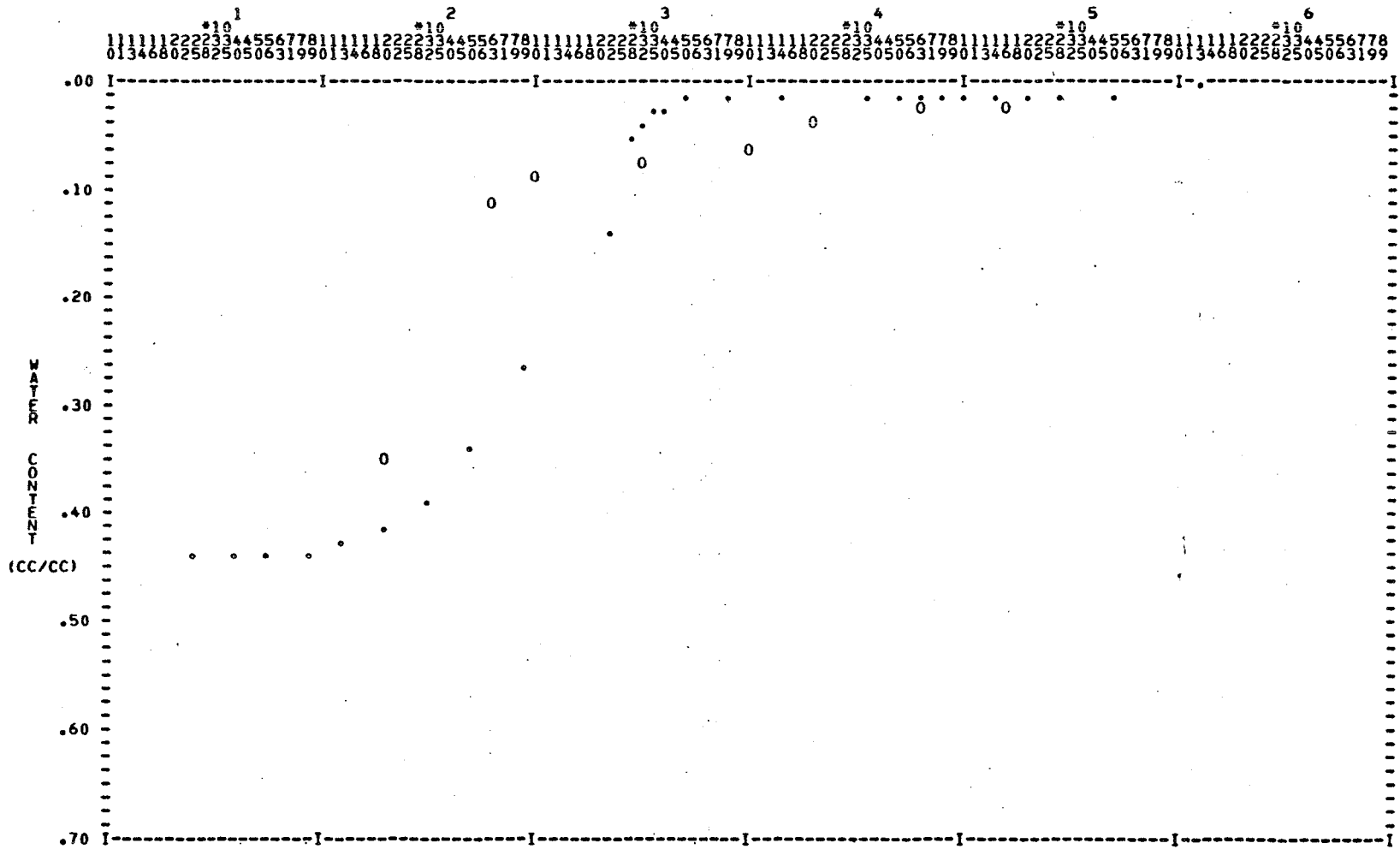
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.006	0.12894E+06
0.012	0.52775E+05
0.013	0.29540E+05
0.014	0.19099E+05
0.014	0.13463E+05
0.014	0.10053E+05
0.015	0.78223E+04
0.015	0.62781E+04
0.015	0.51616E+04
0.016	0.35905E+04
0.017	0.14113E+04
0.018	0.76409E+03
0.019	0.49572E+03
0.019	0.37097E+03
0.021	0.39595E+03
0.025	0.37060E+03
0.033	0.33276E+03
0.045	0.29592E+03
0.133	0.23205E+03
0.262	0.93774E+02
0.340	0.50971E+02
0.388	0.31013E+02
0.415	0.19693E+02
0.427	0.13015E+02
0.433	0.87908E+01
0.435	0.59439E+01
0.436	0.41088E+01
0.437	0.26393E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 69 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.30 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.082	0.150E+05
0.086	0.600E+04
0.095	0.200E+04
0.130	0.100E+04
0.146	0.330E+03
0.173	0.100E+03
0.201	0.600E+02
0.409	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	3.4	0.034
2.00	3.6	0.002
3.00	3.8	0.002
4.00	4.0	0.002
5.00	4.2	0.002
6.00	4.4	0.002
7.00	4.6	0.002
8.00	4.8	0.002
9.00	4.9	0.002
10.00	5.1	0.001
20.00	6.1	0.010
30.00	7.6	0.015
40.00	9.3	0.017
50.00	10.7	0.014
60.00	11.8	0.011
70.00	13.1	0.013
80.00	14.9	0.018
90.00	17.3	0.024
100.00	20.3	0.030
200.00	47.9	0.276
300.00	63.7	0.158
400.00	74.3	0.106
500.00	82.3	0.080
600.00	88.4	0.061
700.00	92.9	0.045
800.00	95.9	0.030
900.00	97.8	0.019
1000.00	98.7	0.009
2000.00	100.0	0.013

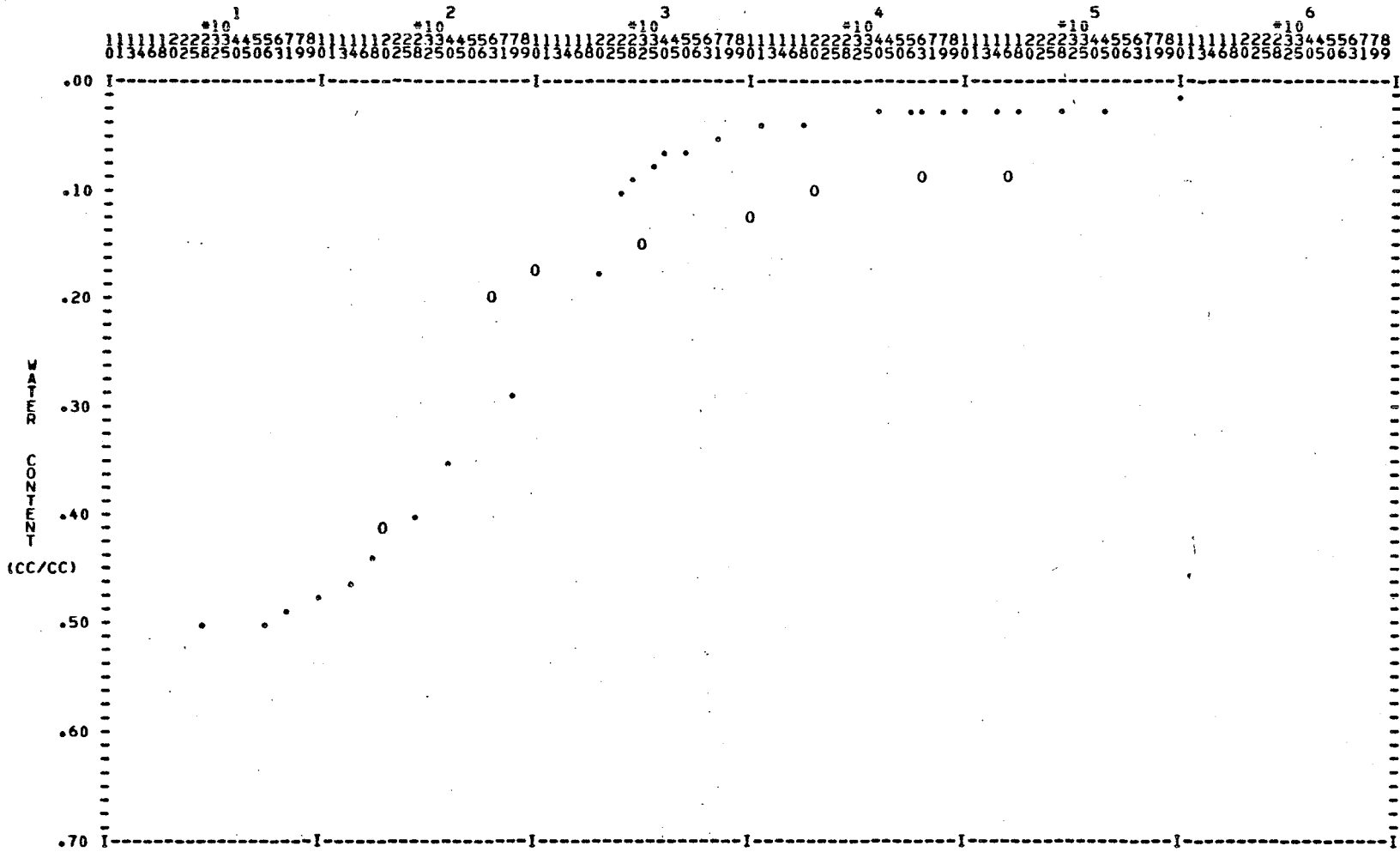
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.009	0.99586E+05
0.019	0.45331E+05
0.020	0.27709E+05
0.021	0.18585E+05
0.022	0.13379E+05
0.023	0.10131E+05
0.024	0.79629E+04
0.025	0.64401E+04
0.026	0.53270E+04
0.028	0.37680E+04
0.035	0.18131E+04
0.043	0.10992E+04
0.051	0.71444E+03
0.057	0.49568E+03
0.063	0.39305E+03
0.071	0.33544E+03
0.082	0.29154E+03
0.096	0.25544E+03
0.174	0.18980E+03
0.284	0.76527E+02
0.351	0.41873E+02
0.399	0.26723E+02
0.435	0.18531E+02
0.462	0.13431E+02
0.481	0.99791E+01
0.494	0.74728E+01
0.501	0.54520E+01
0.506	0.28586E+01

ALPHA = 1.38

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SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 69

0 MEASURED ;      . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.55346E+01

SOIL HORIZON NUMBER 70 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.47 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.021	0.150E+05
0.029	0.600E+04
0.034	0.200E+04
0.056	0.100E+04
0.078	0.330E+03
0.101	0.100E+03
0.140	0.600E+02
0.348	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	0.035	0.035
2.00	0.000	0.000
3.00	0.000	0.000
4.00	0.000	0.000
5.00	0.000	0.000
6.00	0.000	0.000
7.00	0.000	0.000
8.00	0.000	0.000
9.00	0.000	0.000
10.00	0.000	0.000
20.00	0.001	0.001
30.00	0.008	0.008
40.00	0.012	0.012
50.00	0.011	0.011
60.00	0.015	0.015
70.00	0.023	0.023
80.00	0.028	0.028
90.00	0.032	0.032
100.00	0.034	0.034
200.00	0.316	0.316
400.00	0.165	0.165
600.00	0.101	0.101
800.00	0.069	0.069
1000.00	0.049	0.049
2000.00	0.035	0.035
4000.00	0.024	0.024
6000.00	0.015	0.015
8000.00	0.008	0.008
10000.00	0.008	0.008
20000.00	0.017	0.017

PREDICTED MOISTURE CHARACTERISTIC DATA

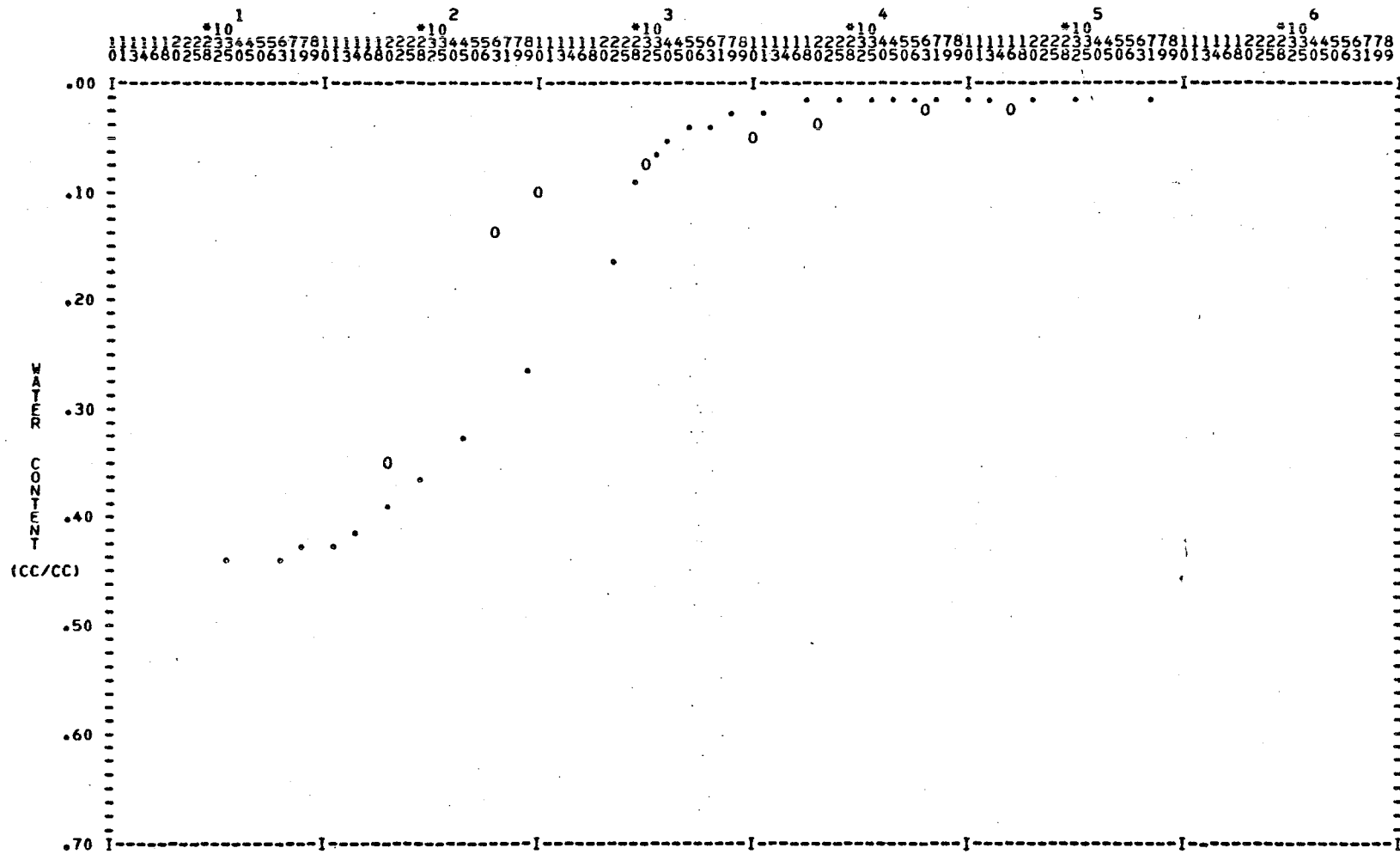
SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.008	0.68227E+05
0.016	0.32080E+05
0.016	0.19816E+05
0.016	0.13286E+05
0.016	0.95422E+04
0.016	0.72050E+04
0.016	0.56455E+04
0.016	0.45517E+04
0.016	0.37529E+04
0.016	0.26120E+04
0.018	0.18147E+04
0.022	0.11610E+04
0.027	0.77280E+03
0.033	0.60322E+03
0.042	0.50216E+03
0.053	0.41626E+03
0.067	0.34917E+03
0.082	0.29693E+03
0.159	0.22148E+03
0.266	0.87779E+02
0.326	0.47178E+02
0.364	0.29554E+02
0.390	0.20227E+02
0.409	0.14619E+02
0.422	0.10869E+02
0.431	0.81777E+01
0.436	0.60642E+01
0.441	0.34216E+01

ALPHA = 1.38

B-140

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 70

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.41929E+01

B-141

SOIL HORIZON NUMBER 71 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.48 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.040	0.150E+05
0.046	0.600E+04
0.052	0.200E+04
0.087	0.100E+04
0.098	0.330E+03
0.120	0.100E+03
0.167	0.600E+02
0.360	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	6.9	0.069
2.00	6.9	0.000
3.00	6.9	0.000
4.00	7.0	0.000
5.00	7.0	0.000
6.00	7.1	0.000
7.00	7.1	0.000
8.00	7.2	0.000
9.00	7.2	0.000
10.00	7.2	0.000
20.00	7.4	0.002
30.00	8.1	0.007
40.00	9.1	0.011
50.00	10.0	0.011
60.00	12.0	0.023
70.00	15.0	0.033
80.00	19.0	0.037
90.00	23.0	0.037
100.00	26.0	0.037
200.00	62.0	0.358
300.00	78.0	0.158
400.00	86.0	0.079
500.00	90.0	0.044
600.00	93.0	0.028
700.00	95.0	0.022
800.00	97.0	0.015
900.00	98.0	0.010
1000.00	98.0	0.005
2000.00	100.0	0.013

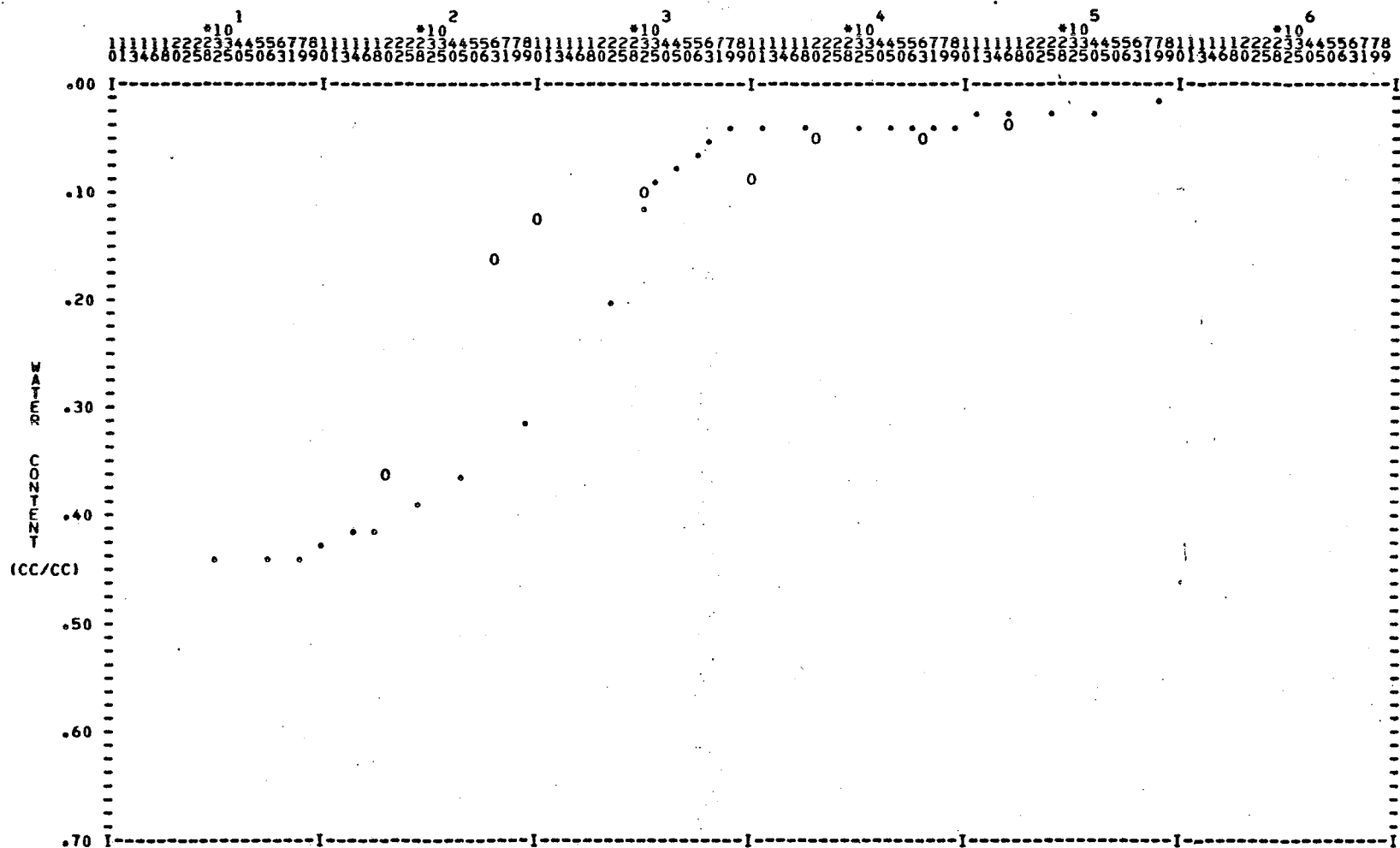
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.015	0.816455E+05
0.031	0.385066E+05
0.031	0.238466E+05
0.031	0.159533E+05
0.031	0.114944E+05
0.031	0.857798E+04
0.031	0.546623E+04
0.031	0.455006E+04
0.031	0.312174E+04
0.031	0.176327E+04
0.031	0.115077E+04
0.031	0.773156E+03
0.050	0.641644E+03
0.061	0.538800E+03
0.077	0.441805E+03
0.093	0.363890E+03
0.110	0.304057E+03
0.197	0.228574E+03
0.311	0.877790E+02
0.363	0.453375E+02
0.391	0.273355E+02
0.407	0.183711E+02
0.418	0.134055E+02
0.426	0.100255E+02
0.431	0.756594E+01
0.435	0.560866E+01
0.439	0.327657E+01

ALPHA = 1.38



SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 71

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.45201E+01

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BULK DENSITY = 1.53 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

[illegible]

0.050	0.150E+05
0.061	0.600E+04
0.066	0.200E+04
0.095	0.100E+04
0.106	0.330E+03
0.125	0.100E+03
0.164	0.600E+02
0.332	0.200E+02

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
0.000	0.00	0.0000
0.005	0.00	0.0000
0.010	0.00	0.0000
0.015	0.00	0.0000
0.020	0.00	0.0000
0.025	0.00	0.0000
0.030	0.00	0.0000
0.035	0.00	0.0000
0.040	0.00	0.0000
0.045	0.00	0.0000
0.050	0.00	0.0000
0.055	0.00	0.0000
0.060	0.00	0.0000
0.065	0.00	0.0000
0.070	0.00	0.0000
0.075	0.00	0.0000
0.080	0.00	0.0000
0.085	0.00	0.0000
0.090	0.00	0.0000
0.095	0.00	0.0000
0.100	0.00	0.0000
0.105	0.00	0.0000
0.110	0.00	0.0000
0.115	0.00	0.0000
0.120	0.00	0.0000
0.125	0.00	0.0000
0.130	0.00	0.0000
0.135	0.00	0.0000
0.140	0.00	0.0000
0.145	0.00	0.0000
0.150	0.00	0.0000
0.155	0.00	0.0000
0.160	0.00	0.0000
0.165	0.00	0.0000
0.170	0.00	0.0000
0.175	0.00	0.0000
0.180	0.00	0.0000
0.185	0.00	0.0000
0.190	0.00	0.0000
0.195	0.00	0.0000
0.200	0.00	0.0000
0.205	0.00	0.0000
0.210	0.00	0.0000
0.215	0.00	0.0000
0.220	0.00	0.0000
0.225	0.00	0.0000
0.230	0.00	0.0000
0.235	0.00	0.0000
0.240	0.00	0.0000
0.245	0.00	0.0000
0.250	0.00	0.0000
0.255	0.00	0.0000
0.260	0.00	0.0000
0.265	0.00	0.0000
0.270	0.00	0.0000
0.275	0.00	0.0000
0.280	0.00	0.0000
0.285	0.00	0.0000
0.290	0.00	0.0000
0.295	0.00	0.0000
0.300	0.00	0.0000
0.305	0.00	0.0000
0.310	0.00	0.0000
0.315	0.00	0.0000
0.320	0.00	0.0000
0.325	0.00	0.0000
0.330	0.00	0.0000
0.335	0.00	0.0000
0.340	0.00	0.0000
0.345	0.00	0.0000
0.350	0.00	0.0000
0.355	0.00	0.0000
0.360	0.00	0.0000
0.365	0.00	0.0000
0.370	0.00	0.0000
0.375	0.00	0.0000
0.380	0.00	0.0000
0.385	0.00	0.0000
0.390	0.00	0.0000
0.395	0.00	0.0000
0.400	0.00	0.0000
0.405	0.00	0.0000
0.410	0.00	0.0000
0.415	0.00	0.0000
0.420	0.00	0.0000
0.425	0.00	0.0000
0.430	0.00	0.0000
0.435	0.00	0.0000
0.440	0.00	0.0000
0.445	0.00	0.0000
0.450	0.00	0.0000
0.455	0.00	0.0000
0.460	0.00	0.0000
0.465	0.00	0.0000
0.470	0.00	0.0000
0.475	0.00	0.0000
0.480	0.00	0.0000
0.485	0.00	0.0000
0.490	0.00	0.0000
0.495	0.00	0.0000
0.500	0.00	

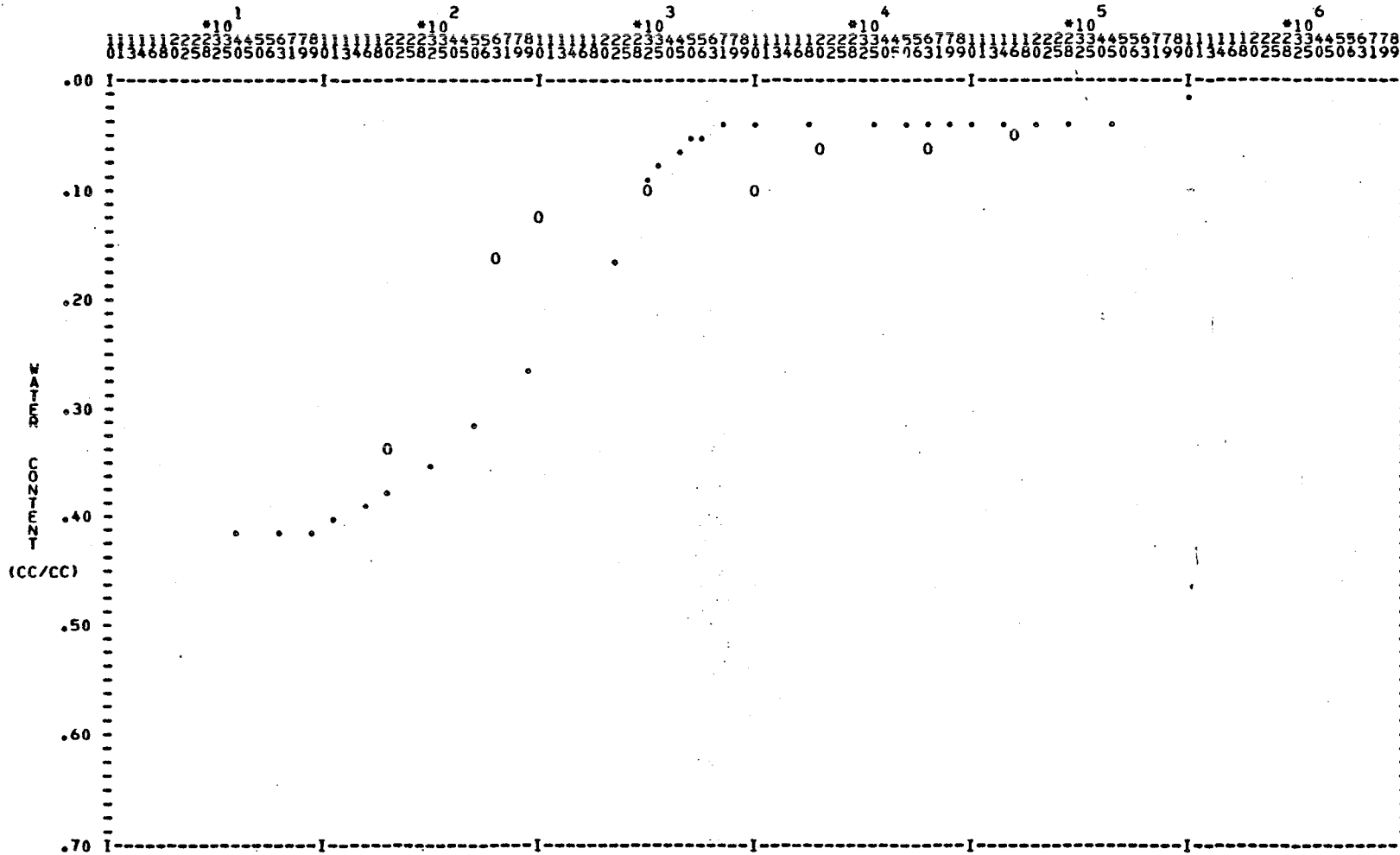
1.00	7.3	0.073
2.00	7.4	0.091
3.00	7.5	0.091
4.00	7.6	0.091
5.00	7.7	0.091
6.00	7.8	0.091
7.00	7.9	0.091
8.00	7.9	0.091
9.00	8.0	0.091
10.00	8.0	0.091
20.00	8.4	0.091
30.00	8.4	0.094
40.00	8.9	0.095
50.00	9.4	0.096
60.00	9.9	0.095
70.00	9.9	0.095
80.00	10.9	0.099
90.00	15.4	0.025
100.00	22.2	0.029
200.00	21.4	0.032
300.00	53.1	0.317
400.00	69.5	0.164
500.00	79.3	0.099
600.00	85.8	0.065
700.00	90.2	0.044
800.00	93.4	0.032
900.00	95.6	0.022
1000.00	97.0	0.014
2000.00	97.8	0.008
	100.0	0.022

SOIL WATER CONTENT	SOIL WATER PRESSURE
( CC/CC )	( -CM H2O )

0.016	0.10564E	06
0.032	0.47279E	05
0.032	0.28527E	05
0.033	0.18988E	05
0.033	0.13586E	05
0.033	0.10232E	05
0.033	0.80024E	04
0.034	0.64415E	04
0.034	0.53041E	04
0.035	0.36741E	04
0.036	0.17270E	04
0.039	0.10567E	04
0.041	0.69608E	03
0.044	0.58589E	03
0.050	0.50654E	03
0.060	0.42522E	03
0.071	0.35909E	03
0.084	0.30663E	03
0.157	0.23208E	03
0.259	0.91791E	02
0.314	0.49159E	02
0.349	0.30595E	02
0.372	0.20775E	02
0.388	0.14980E	02
0.399	0.11150E	02
0.407	0.84410E	01
0.412	0.63773E	01
0.418	0.37629E	01

**ALPHA = 1.38**

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 72

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.52099E+01

SOIL HORIZON NUMBER 73 ( SEE TABLE 4 FOR IDENTIFICATION )

# DENSITY DATA:

BULK DENSITY = 1.49 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

# MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.033	0.150E+05
0.040	0.600E+04
0.045	0.200E+04
0.103	0.100E+04
0.116	0.330E+03
0.140	0.100E+03
0.182	0.600E+02
0.346	0.200E+02

# PARTICLE SIZE DISTRIBUTION DATA

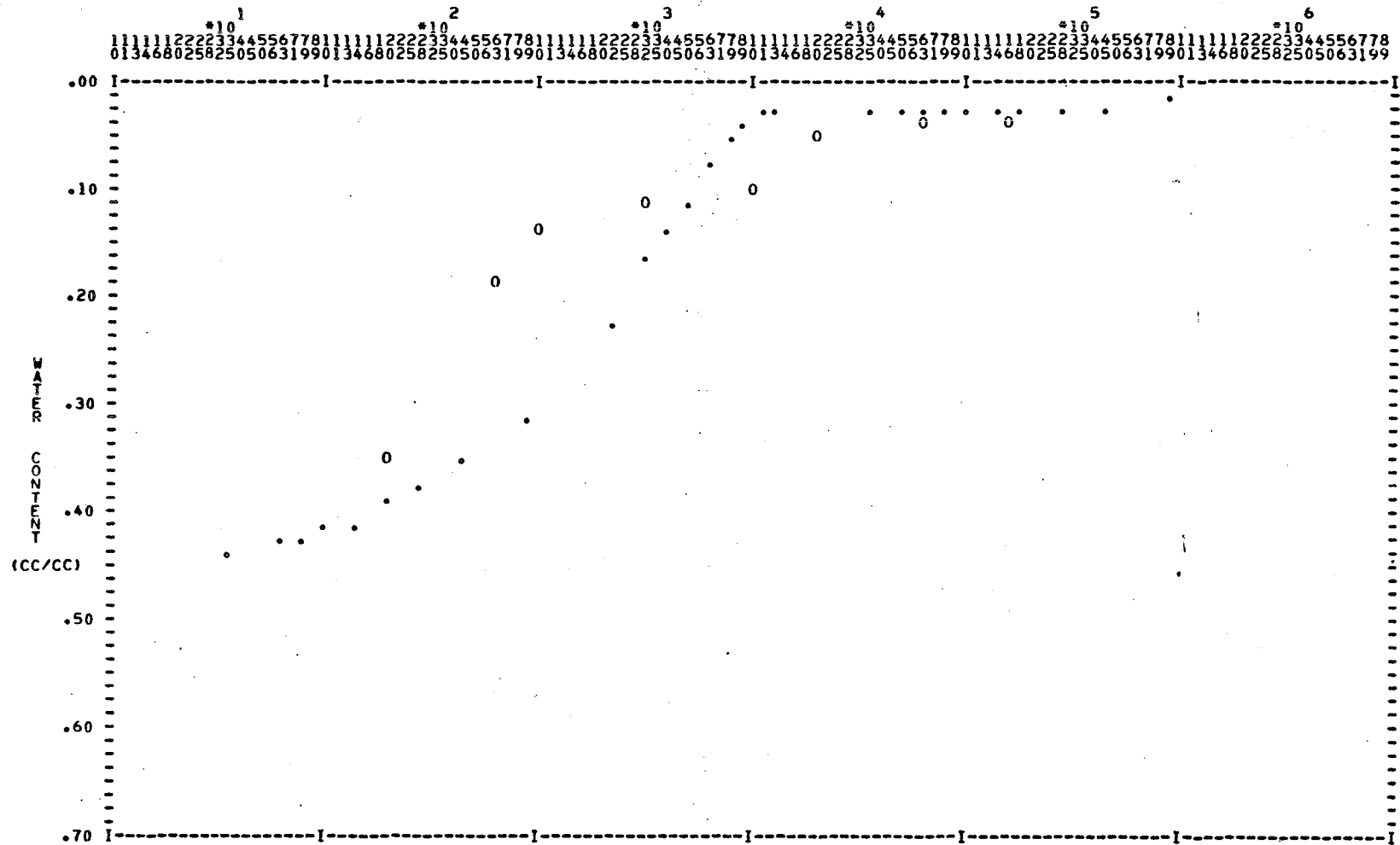
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	4.4	0.044
2.00	4.5	0.001
3.00	4.6	0.001
4.00	4.7	0.001
5.00	4.8	0.001
6.00	4.9	0.001
7.00	5.0	0.001
8.00	5.1	0.001
9.00	5.1	0.001
10.00	5.2	0.001
20.00	5.6	0.004
30.00	6.7	0.001
40.00	6.7	0.010
50.00	6.8	0.021
60.00	7.1	0.053
70.00	7.6	0.079
80.00	7.9	0.073
90.00	8.0	0.061
100.00	8.5	0.049
200.00	8.8	0.245
300.00	7.6	0.125
400.00	8.3	0.072
500.00	8.8	0.046
600.00	91.7	0.035
700.00	94.3	0.026
800.00	96.1	0.018
900.00	97.4	0.012
1000.00	98.1	0.007
2000.00	100.0	0.019

# PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.010	0.93088E+05
0.020	0.44947E+05
0.020	0.27971E+05
0.021	0.18766E+05
0.021	0.13472E+05
0.022	0.10163E+05
0.022	0.79544E+04
0.022	0.64048E+04
0.023	0.52739E+04
0.024	0.36440E+04
0.025	0.12272E+04
0.027	0.11453E+04
0.034	0.89102E+03
0.050	0.77302E+03
0.078	0.63659E+03
0.111	0.50587E+03
0.140	0.40140E+03
0.163	0.31793E+03
0.207	0.21430E+03
0.307	0.84154E+02
0.349	0.44915E+02
0.376	0.28027E+02
0.394	0.19254E+02
0.407	0.13990E+02
0.417	0.10477E+02
0.424	0.79750E+01
0.428	0.60655E+01
0.434	0.35486E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



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SOIL HORIZON NUMBER 74 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.38 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.018	0.150E+05
0.026	0.600E+04
0.033	0.200E+04
0.037	0.100E+04
0.057	0.300E+03
0.103	0.100E+03
0.124	0.050E+02
0.159	0.050E+02
0.384	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	1.4	0.014
2.00	0.0	0.006
4.00	0.4	0.004
5.00	0.7	0.003
6.00	0.9	0.002
7.00	1.1	0.002
8.00	1.3	0.002
10.00	1.6	0.001
20.00	2.7	0.001
40.00	6.6	0.006
60.00	9.0	0.004
80.00	12.2	0.003
100.00	16.6	0.003
200.00	33.3	0.003
400.00	66.6	0.003
600.00	88.8	0.003
800.00	90.0	0.003
1000.00	91.1	0.004
2000.00	99.2	0.021
	100.0	0.008

PREDICTED MOISTURE CHARACTERISTIC DATA

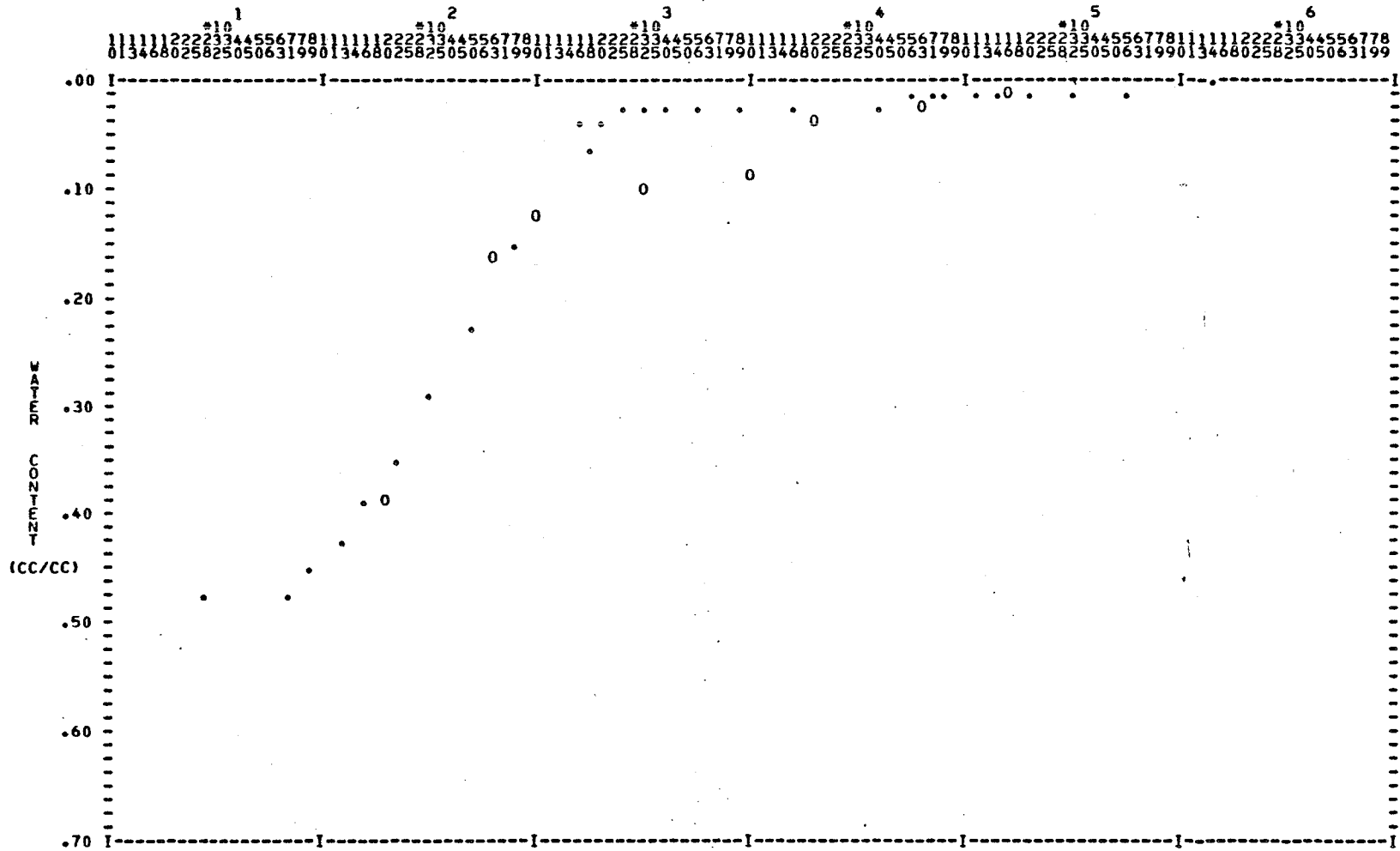
SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.005	0.135E+06
0.010	0.000E+00
0.012	0.000E+00
0.013	0.000E+00
0.014	0.000E+00
0.015	0.000E+00
0.016	0.000E+00
0.017	0.000E+00
0.017	0.000E+00
0.020	0.000E+00
0.023	0.000E+00
0.026	0.000E+00
0.030	0.000E+00
0.033	0.000E+00
0.036	0.000E+00
0.040	0.000E+00
0.047	0.000E+00
0.050	0.000E+00
0.052	0.000E+00
0.055	0.000E+00
0.058	0.000E+00
0.060	0.000E+00
0.063	0.000E+00
0.067	0.000E+00
0.070	0.000E+00
0.073	0.000E+00
0.076	0.000E+00
0.079	0.000E+00
0.082	0.000E+00
0.085	0.000E+00
0.088	0.000E+00
0.091	0.000E+00
0.094	0.000E+00
0.097	0.000E+00
0.100	0.000E+00
0.103	0.000E+00
0.106	0.000E+00
0.109	0.000E+00
0.112	0.000E+00
0.115	0.000E+00
0.118	0.000E+00
0.121	0.000E+00
0.124	0.000E+00
0.127	0.000E+00
0.130	0.000E+00
0.133	0.000E+00
0.136	0.000E+00
0.139	0.000E+00
0.142	0.000E+00
0.145	0.000E+00
0.148	0.000E+00
0.151	0.000E+00
0.154	0.000E+00
0.157	0.000E+00
0.160	0.000E+00
0.163	0.000E+00
0.166	0.000E+00
0.169	0.000E+00
0.172	0.000E+00
0.175	0.000E+00
0.178	0.000E+00
0.181	0.000E+00
0.184	0.000E+00
0.187	0.000E+00
0.190	0.000E+00
0.193	0.000E+00
0.196	0.000E+00
0.199	0.000E+00
0.202	0.000E+00
0.205	0.000E+00
0.208	0.000E+00
0.211	0.000E+00
0.214	0.000E+00
0.217	0.000E+00
0.220	0.000E+00
0.223	0.000E+00
0.226	0.000E+00
0.229	0.000E+00
0.232	0.000E+00
0.235	0.000E+00
0.238	0.000E+00
0.241	0.000E+00
0.244	0.000E+00
0.247	0.000E+00
0.250	0.000E+00
0.253	0.000E+00
0.256	0.000E+00
0.259	0.000E+00
0.262	0.000E+00
0.265	0.000E+00
0.268	0.000E+00
0.271	0.000E+00
0.274	0.000E+00
0.277	0.000E+00
0.280	0.000E+00
0.283	0.000E+00
0.286	0.000E+00
0.289	0.000E+00
0.292	0.000E+00
0.295	0.000E+00
0.298	0.000E+00
0.301	0.000E+00
0.304	0.000E+00
0.307	0.000E+00
0.310	0.000E+00
0.313	0.000E+00
0.316	0.000E+00
0.319	0.000E+00
0.322	0.000E+00
0.325	0.000E+00
0.328	0.000E+00
0.331	0.000E+00
0.334	0.000E+00
0.337	0.000E+00
0.340	0.000E+00
0.343	0.000E+00
0.346	0.000E+00
0.349	0.000E+00
0.352	0.000E+00
0.355	0.000E+00
0.358	0.000E+00
0.361	0.000E+00
0.364	0.000E+00
0.367	0.000E+00
0.370	0.000E+00
0.373	0.000E+00
0.376	0.000E+00
0.379	0.000E+00
0.382	0.000E+00
0.385	0.000E+00
0.388	0.000E+00
0.391	0.000E+00
0.394	0.000E+00
0.397	0.000E+00
0.400	0.000E+00
0.403	0.000E+00
0.406	0.000E+00
0.409	0.000E+00
0.412	0.000E+00
0.415	0.000E+00
0.418	0.000E+00
0.421	0.000E+00
0.424	0.000E+00
0.427	0.000E+00
0.430	0.000E+00
0.433	0.000E+00
0.436	0.000E+00
0.439	0.000E+00
0.442	0.000E+00
0.445	0.000E+00
0.448	0.000E+00
0.451	0.000E+00
0.454	0.000E+00
0.457	0.000E+00
0.460	0.000E+00
0.463	0.000E+00
0.466	0.000E+00
0.469	0.000E+00
0.472	0.000E+00
0.475	0.000E+00
0.478	0.000E+00
0.481	0.000E+00
0.484	0.000E+00
0.487	0.000E+00
0.490	0.000E+00
0.493	0.000E+00
0.496	0.000E+00
0.499	0.000E+00
0.502	0.000E+00
0.505	0.000E+00
0.508	0.000E+00
0.511	0.000E+00
0.514	0.000E+00
0.517	0.000E+00
0.520	0.000E+00
0.523	0.000E+00
0.526	0.000E+00
0.529	0.000E+00
0.532	0.000E+00
0.535	0.000E+00
0.538	0.000E+00
0.541	0.000E+00
0.544	0.000E+00
0.547	0.000E+00
0.550	0.000E+00
0.553	0.000E+00
0.556	0.000E+00
0.559	0.000E+00
0.562	0.000E+00
0.565	0.000E+00
0.568	0.000E+00
0.571	0.000E+00
0.574	0.000E+00
0.577	0.000E+00
0.580	0.000E+00
0.583	0.000E+00
0.586	0.000E+00
0.589	0.000E+00
0.592	0.000E+00
0.595	0.000E+00
0.598	0.000E+00
0.601	0.000E+00
0.604	0.000E+00
0.607	0.000E+00
0.610	0.000E+00
0.613	0.000E+00
0.616	0.000E+00
0.619	0.000E+00
0.622	0.000E+00
0.625	0.000E+00
0.628	0.000E+00
0.631	0.000E+00
0.634	0.000E+00
0.637	0.000E+00
0.640	0.000E+00
0.643	0.000E+00
0.646	0.000E+00
0.649	0.000E+00
0.652	0.000E+00
0.655	0.000E+00
0.658	0.000E+00
0.661	0.000E+00
0.664	0.000E+00
0.667	0.000E+00
0.670	0.000E+00
0.673	0.000E+00
0.676	0.000E+00
0.679	0.000E+00
0.682	0.000E+00
0.685	0.000E+00
0.688	0.000E+00
0.691	0.000E+00
0.694	0.000E+00
0.697	0.000E+00
0.700	0.000E+00
0.703	0.000E+00
0.706	0.000E+00
0.709	0.000E+00
0.712	0.000E+00
0.715	0.000E+00
0.718	0.000E+00
0.721	0.000E+00
0.724	0.000E+00
0.727	0.000E+00
0.730	0.000E+00
0.733	0.000E+00
0.736	0.000E+00
0.739	0.000E+00
0.742	0.000E+00
0.745	0.000E+00
0.748	0.000E+00
0.751	0.000E+00
0.754	0.000E+00
0.757	0.000E+00
0.760	0.000E+00
0.763	0.000E+00
0.766	0.000E+00
0.769	0.000E+00
0.772	0.000E+00
0.775	0.000E+00
0.778	0.000E+00
0.781	0.000E+00
0.784	0.000E+00
0.787	0.000E+00
0.790	0.000E+00
0.793	0.000E+00
0.796	0.000E+00
0.799	0.000E+00
0.802	0.000E+00
0.805	0.000E+00
0.808	0.000E+00
0.811	0.000E+00
0.814	0.000E+00
0.817	0.000E+00
0.820	0.000E+00
0.823	0.000E+00
0.826	0.000E+00
0.829	0.000E+00
0.832	0.000E+00
0.835	0.000E+00
0.838	0.000E+00
0.841	0.000E+00
0.844	0.000E+00
0.847	0.000E+00
0.850	0.000E+00
0.853	0.000E+00
0.856	0.000E+00
0.859	0.000E+00
0.862	0.000E+00
0.865	0.000E+00
0.868	0.000E+00
0.871	0.000E+00
0.874	0.000E+00
0.877	0.000E+00
0.880	0.000E+00
0.883	0.000E+00
0.886	0.000E+00
0.889	0.000E+00
0.892	0.000E+00
0.895	0.000E+00
0.898	0.000E+00
0.901	0.000E+00
0.904	0.000E+00
0.907	0.000E+00
0.910	0.000E+00
0.913	0.000E+00
0.916	0.000E+00
0.919	0.000E+00
0.922	0.000E+00
0.925	0.000E+00
0.928	0.000E+00
0.931	0.000E+00
0.934	0.000E+00
0.937	0.000E+00
0.940	0.000E+00
0.943	0.000E+00
0.946	0.000E+00
0.949	0.000E+00
0.952	0.000E+00
0.955	0.000E+00
0.958	0.000E+00
0.961	0.000E+00
0.964	0.000E+00
0.967	0.000E+00
0.970	0.000E+00
0.973	0.000E+00
0.976	0.000E+00
0.979	0.000E+00
0.982	0.000E+00
0.985	0.000E+00
0.988	0.000E+00
0.991	0.000E+00
0.994	0.000E+00
0.997	0.000E+00
1.000	0.000E+00

ALPHA = 1.38

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SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 74

O MEASURED

• PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.38854E+01

SOIL HORIZON NUMBER 75 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.40 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.021	0.150E+05
0.022	0.600E+04
0.029	0.200E+04
0.087	0.100E+04
0.101	0.330E+03
0.129	0.100E+03
0.171	0.600E+02
0.370	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	0.9	0.009
2.00	1.2	0.003
3.00	1.4	0.002
4.00	1.6	0.002
5.00	1.7	0.002
6.00	1.9	0.001
7.00	2.0	0.001
8.00	2.0	0.001
9.00	2.0	0.001
10.00	2.0	0.001
20.00	2.0	0.008
30.00	2.0	0.007
40.00	2.0	0.005
50.00	2.0	0.004
60.00	2.0	0.002
70.00	2.0	0.001
80.00	2.0	0.001
90.00	2.0	0.001
100.00	2.0	0.001
200.00	2.0	0.009
300.00	2.0	0.190
400.00	2.0	0.159
500.00	2.0	0.122
600.00	2.0	0.106
700.00	2.0	0.094
800.00	2.0	0.074
900.00	2.0	0.054
1000.00	2.0	0.034
2000.00	100.0	0.012

PREDICTED MOISTURE CHARACTERISTIC DATA

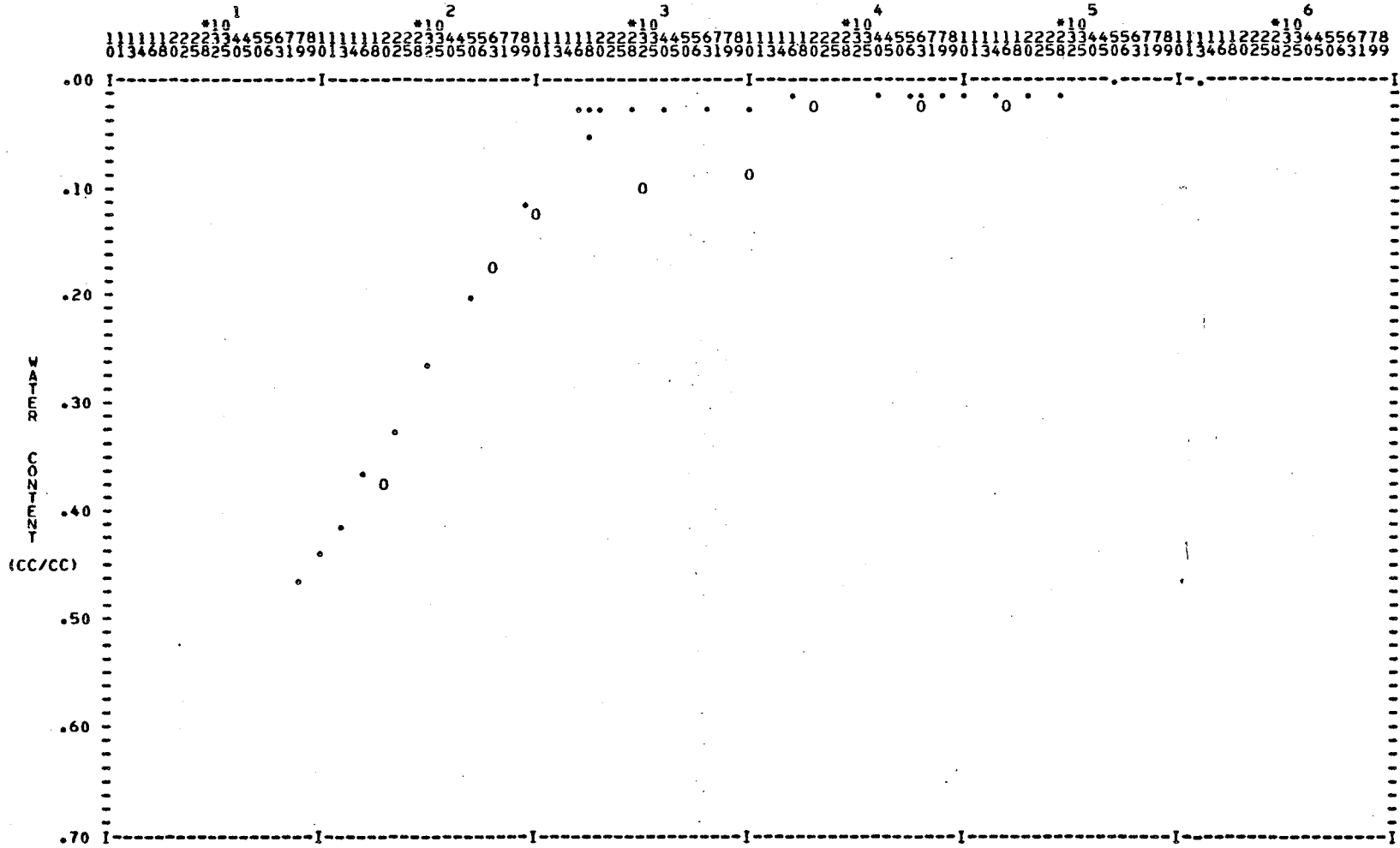
SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.003	0.11964E+06
0.006	0.49837E+05
0.007	0.28748E+05
0.008	0.18964E+05
0.009	0.13579E+05
0.009	0.10271E+05
0.010	0.80811E+04
0.010	0.65492E+04
0.011	0.54316E+04
0.013	0.39044E+04
0.017	0.16779E+04
0.019	0.95144E+03
0.022	0.60691E+03
0.023	0.40106E+03
0.024	0.27391E+03
0.025	0.20824E+03
0.025	0.17348E+03
0.026	0.15143E+03
0.049	0.16855E+03
0.118	0.85519E+02
0.200	0.48712E+02
0.366	0.31238E+02
0.520	0.22207E+02
0.767	0.16685E+02
0.407	0.12754E+02
0.437	0.98553E+01
0.458	0.75964E+01
0.469	0.30365E+01

ALPHA = 1.38

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SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON- NUMBER 75

O MEASURED ;      . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.51647E+01

SOIL HORIZON NUMBER 76 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.52 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.023	0.150E+05
0.029	0.600E+04
0.033	0.200E+04
0.046	0.100E+03
0.058	0.330E+03
0.079	0.100E+03
0.112	0.600E+02
0.313	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

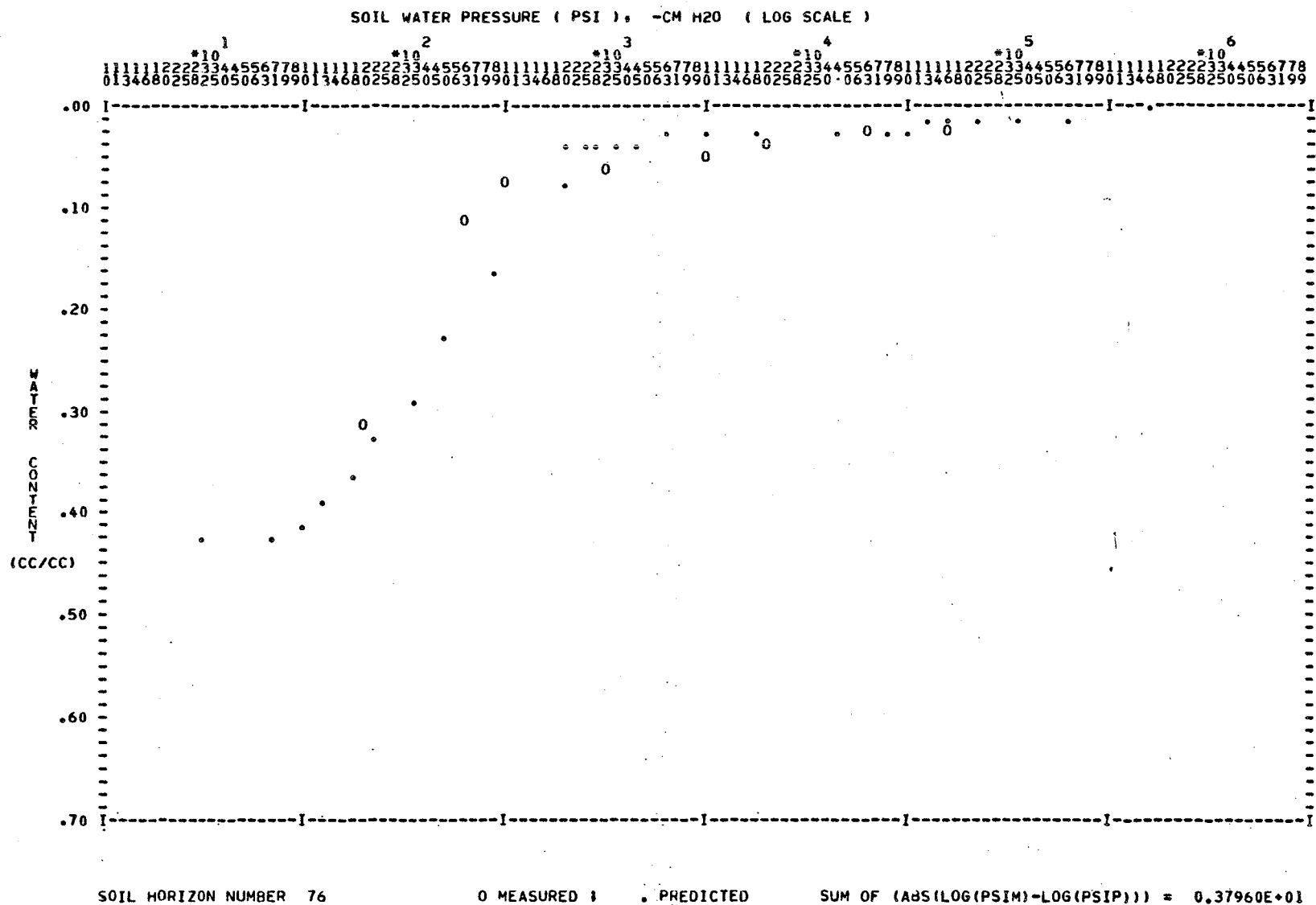
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	2.0	0.020
2.00	2.8	0.008
3.00	3.3	0.005
4.00	3.7	0.004
5.00	4.0	0.003
6.00	4.2	0.002
7.00	4.4	0.002
8.00	4.6	0.002
9.00	4.8	0.002
10.00	4.9	0.001
20.00	5.9	0.010
30.00	6.5	0.006
40.00	7.0	0.004
50.00	7.3	0.003
60.00	7.6	0.003
70.00	7.9	0.003
80.00	8.3	0.003
90.00	8.6	0.004
100.00	9.0	0.004
200.00	27.6	0.186
300.00	46.1	0.185
400.00	61.1	0.149
500.00	72.1	0.110
600.00	81.1	0.090
700.00	88.6	0.075
800.00	94.1	0.055
900.00	97.5	0.034
1000.00	99.0	0.015
2000.00	100.0	0.010

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.006	0.15872E+06
0.013	0.64696E+05
0.015	0.36046E+05
0.016	0.23275E+05
0.017	0.16407E+05
0.018	0.12261E+05
0.019	0.95510E+04
0.020	0.76757E+04
0.021	0.63199E+04
0.023	0.44311E+04
0.026	0.18112E+04
0.029	0.10062E+04
0.030	0.64588E+03
0.032	0.46178E+03
0.033	0.35811E+03
0.035	0.28889E+03
0.036	0.23949E+03
0.038	0.20263E+03
0.078	0.20816E+03
0.157	0.93242E+02
0.229	0.52778E+02
0.284	0.33591E+02
0.327	0.23570E+02
0.362	0.17531E+02
0.390	0.13193E+02
0.409	0.99052E+01
0.419	0.70926E+01
0.424	0.32145E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 77 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.57 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.028	0.150E+05
0.033	0.600E+04
0.039	0.200E+04
0.053	0.100E+04
0.064	0.330E+03
0.075	0.100E+03
0.110	0.600E+02
0.297	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	3.5	0.035
2.00	4.4	0.009
3.00	5.0	0.006
4.00	5.4	0.004
5.00	5.8	0.004
6.00	6.1	0.003
7.00	6.3	0.002
8.00	6.5	0.002
9.00	6.7	0.002
10.00	6.9	0.002
20.00	7.9	0.010
30.00	8.4	0.005
40.00	8.8	0.004
50.00	9.1	0.003
60.00	9.4	0.003
70.00	9.6	0.002
80.00	9.8	0.002
90.00	10.0	0.002
100.00	10.0	0.002
200.00	25.0	0.153
300.00	43.4	0.179
400.00	53.1	0.147
500.00	69.9	0.111
600.00	78.9	0.093
700.00	86.6	0.081
800.00	92.7	0.061
900.00	96.7	0.040
1000.00	98.7	0.020
2000.00	100.0	0.013

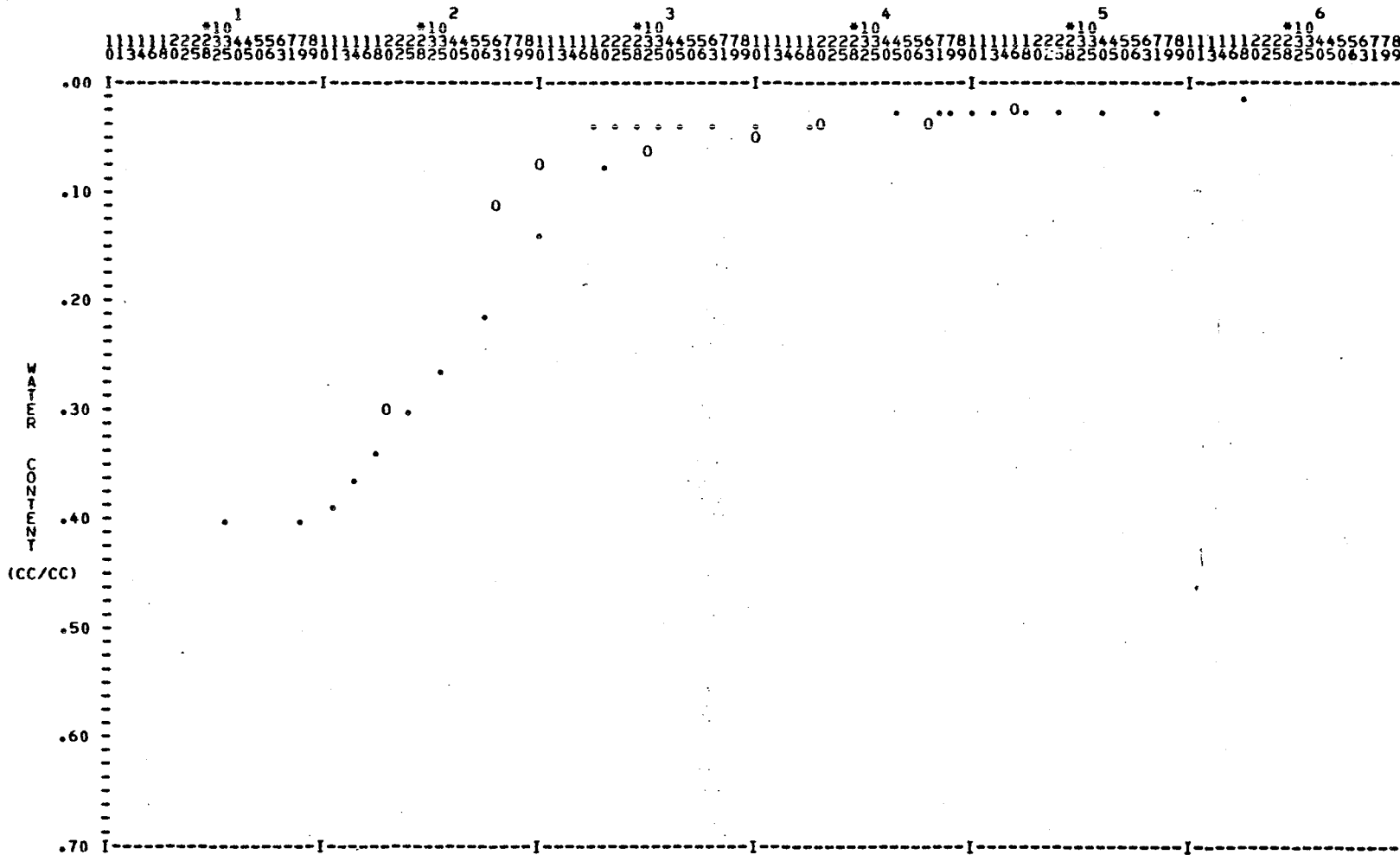
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.005	0.16875E+06
0.019	0.69205E+05
0.021	0.38787E+05
0.023	0.25065E+05
0.024	0.17647E+05
0.025	0.13157E+05
0.026	0.10821E+05
0.027	0.81883E+04
0.028	0.67196E+04
0.030	0.46305E+04
0.033	0.18367E+04
0.035	0.10117E+04
0.036	0.65024E+03
0.038	0.46144E+03
0.039	0.34978E+03
0.040	0.27584E+03
0.040	0.22406E+03
0.041	0.18624E+03
0.073	0.20850E+03
0.141	0.96332E+02
0.207	0.54704E+02
0.259	0.34928E+02
0.501	0.24657E+02
0.1337	0.18475E+02
0.1335	0.13988E+02
0.1386	0.10603E+02
0.1398	0.77999E+01
0.405	0.35125E+01

ALPHA = 1.38

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SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 77

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.33864E+01

SOIL HORIZON NUMBER 78 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.61 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.011	0.150E+05
0.016	0.600E+04
0.016	0.200E+04
0.029	0.100E+04
0.039	0.330E+03
0.048	0.100E+03
0.100	0.600E+02
0.306	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	1.4	0.014
2.00	1.5	0.001
3.00	1.6	0.001
4.00	1.6	0.001
5.00	1.7	0.001
6.00	1.8	0.001
7.00	1.8	0.001
8.00	1.9	0.000
9.00	1.9	0.000
10.00	1.9	0.000
20.00	1.9	0.003
30.00	1.9	0.003
40.00	1.9	0.003
50.00	1.9	0.002
60.00	1.9	0.002
70.00	3.4	0.003
80.00	3.7	0.003
90.00	4.0	0.003
100.00	4.4	0.004
200.00	10.7	0.163
300.00	19.5	0.189
400.00	44.4	0.152
500.00	66.6	0.116
600.00	76.6	0.098
700.00	84.9	0.085
800.00	91.4	0.065
900.00	95.9	0.044
1000.00	98.3	0.024
2000.00	100.0	0.017

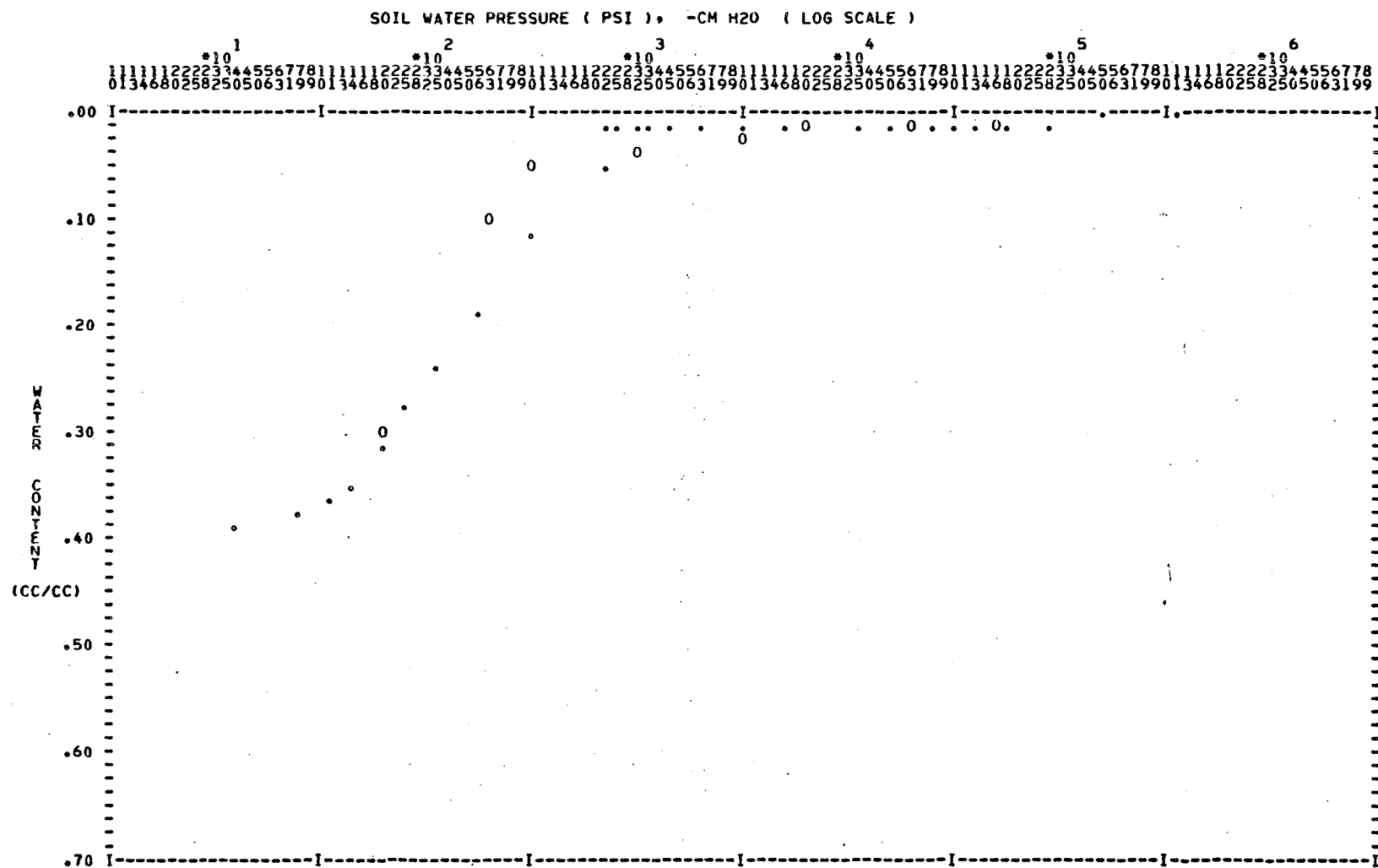
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.003	0.11080E+06
0.006	0.47695E+06
0.006	0.28136E+06
0.007	0.18654E+06
0.007	0.13323E+06
0.007	0.10053E+06
0.007	0.78883E+05
0.007	0.63309E+05
0.008	0.36200E+05
0.008	0.36553E+05
0.009	0.16553E+05
0.010	0.96881E+04
0.011	0.61882E+04
0.012	0.44338E+04
0.013	0.37756E+04
0.014	0.30000E+04
0.017	0.55000E+03
0.040	0.11771E+03
0.100	0.10000E+03
0.150	0.10000E+03
0.200	0.10000E+03
0.300	0.10000E+03
0.400	0.10000E+03
0.500	0.10000E+03
0.600	0.10000E+03
0.700	0.10000E+03
0.800	0.10000E+03
0.900	0.10000E+03
1.000	0.10000E+03
2.000	0.10000E+03

ALPHA = 1.38

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SOIL HORIZON NUMBER 79 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.08 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.080	0.150E+05
0.099	0.600E+04
0.117	0.200E+04
0.240	0.100E+04
0.264	0.330E+03
0.287	0.100E+03
0.311	0.600E+02
0.446	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	11.6	0.116
2.00	13.9	0.023
3.00	15.4	0.015
4.00	16.6	0.012
5.00	17.7	0.010
6.00	18.5	0.009
7.00	19.3	0.008
8.00	19.9	0.007
9.00	20.6	0.006
10.00	21.1	0.006
20.00	25.2	0.041
30.00	28.1	0.029
40.00	30.3	0.022
50.00	31.9	0.015
60.00	32.5	0.008
70.00	33.1	0.004
80.00	33.4	0.003
90.00	33.7	0.003
100.00	34.0	0.003
200.00	38.3	0.043
300.00	43.3	0.050
400.00	46.3	0.030
500.00	49.3	0.030
600.00	52.3	0.030
700.00	54.3	0.020
800.00	57.3	0.030
900.00	58.3	0.010
1000.00	59.3	0.010
2000.00	100.0	0.015

PREDICTED MOISTURE CHARACTERISTIC DATA

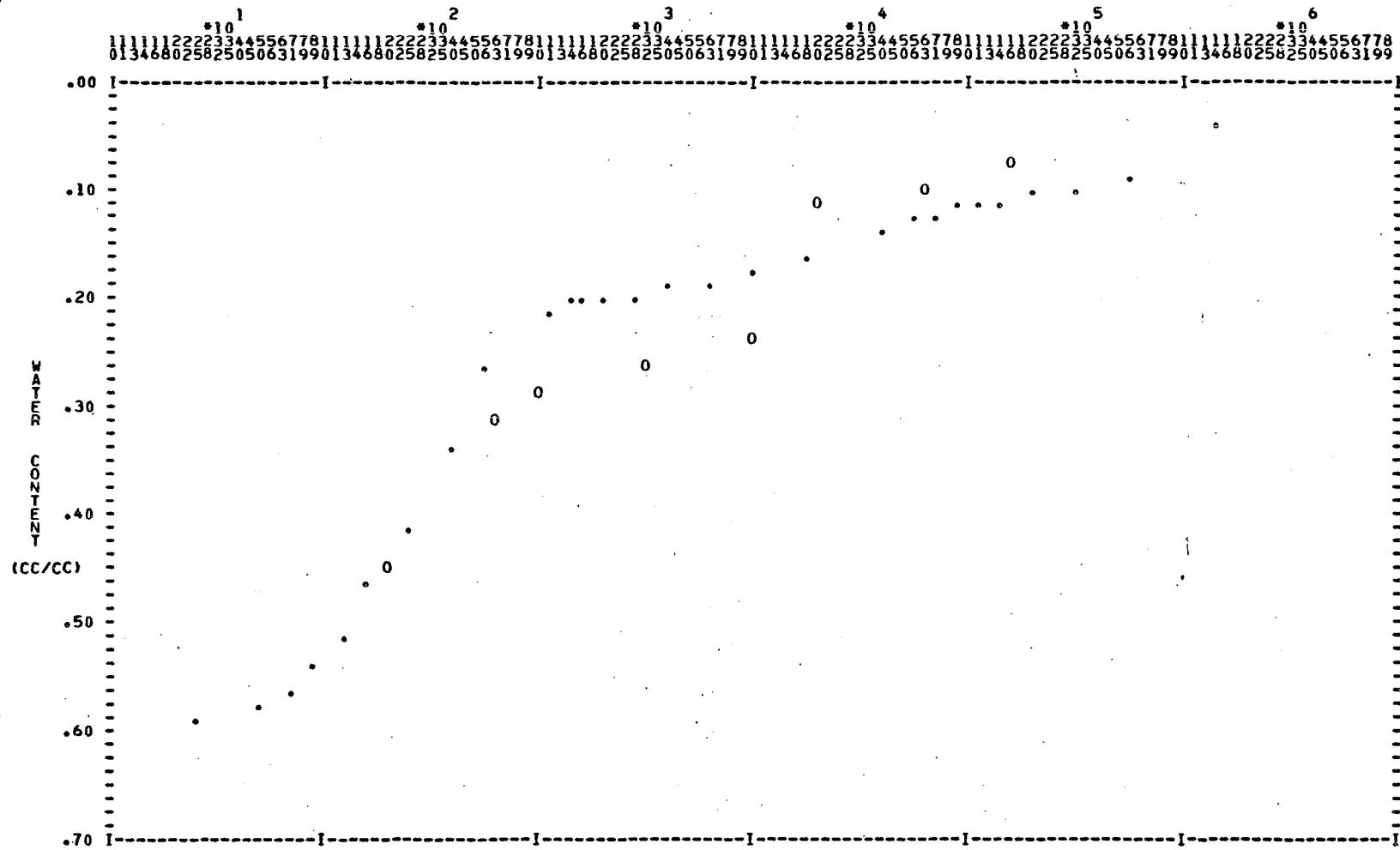
SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.041	0.13826E+06
0.087	0.57009E+05
0.095	0.32291E+05
0.101	0.21080E+05
0.104	0.14930E+05
0.112	0.11231E+05
0.120	0.87852E+04
0.124	0.70844E+04
0.127	0.58500E+04
0.137	0.41397E+04
0.158	0.17426E+04
0.173	0.97399E+03
0.184	0.61089E+03
0.191	0.39934E+03
0.195	0.27098E+03
0.197	0.20148E+03
0.199	0.16448E+03
0.200	0.14422E+03
0.215	0.11348E+03
0.257	0.50155E+02
0.332	0.38025E+02
0.411	0.24406E+02
0.467	0.16391E+02
0.510	0.12193E+02
0.543	0.91904E+01
0.566	0.69281E+01
0.579	0.50301E+01
0.588	0.24828E+01

ALPHA = 1.38

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SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 79

0 MEASURED :

. PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.42154E+01

SOIL HORIZON NUMBER 80 ( SEE TARLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.27 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.086	0.150E+05
0.100	0.600E+04
0.131	0.200E+04
0.184	0.100E+04
0.206	0.300E+03
0.222	0.100E+03
0.229	0.600E+02
0.344	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	10.3	0.103
2.00	12.6	0.023
3.00	14.1	0.015
4.00	15.2	0.011
5.00	15.5	0.010
6.00	17.0	0.008
7.00	17.7	0.007
8.00	18.3	0.006
9.00	18.9	0.006
10.00	19.4	0.005
20.00	23.1	0.037
30.00	25.6	0.025
40.00	27.5	0.019
50.00	28.8	0.013
60.00	30.6	0.008
70.00	30.0	0.004
80.00	30.4	0.003
90.00	30.7	0.003
100.00	31.0	0.003
200.00	35.3	0.043
300.00	40.3	0.100
400.00	61.6	0.163
500.00	71.3	0.117
600.00	81.5	0.082
700.00	88.4	0.069
800.00	93.5	0.051
900.00	96.7	0.033
1000.00	98.3	0.016
2000.00	100.0	0.017

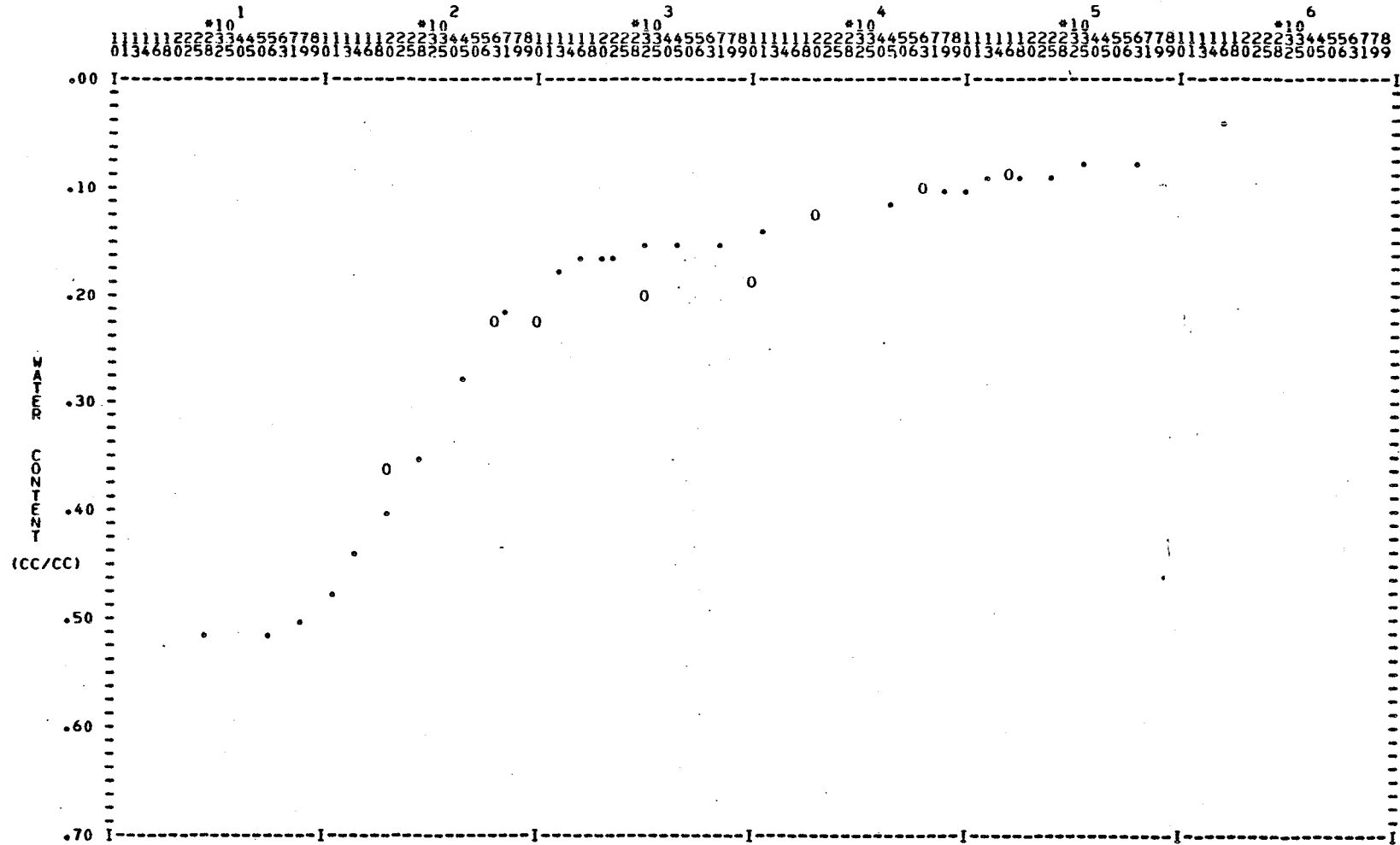
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.033	0.15989E+06
0.059	0.65679E+05
0.076	0.37017E+05
0.082	0.24078E+05
0.086	0.17061E+05
0.090	0.12800E+05
0.094	0.10003E+05
0.097	0.80607E+04
0.100	0.66521E+04
0.111	0.46995E+04
0.127	0.19602E+04
0.138	0.10922E+04
0.147	0.68995E+03
0.152	0.45711E+03
0.155	0.31519E+03
0.157	0.23655E+03
0.159	0.19194E+03
0.161	0.16404E+03
0.173	0.13014E+03
0.210	0.68672E+02
0.278	0.44364E+02
0.351	0.28107E+02
0.403	0.19194E+02
0.442	0.14255E+02
0.473	0.10757E+02
0.495	0.81233E+01
0.508	0.59270E+01
0.516	0.29409E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



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SOIL HORIZON NUMBR 81 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.36 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.144	0.150E+05
0.162	0.600E+04
0.171	0.200E+04
0.237	0.100E+04
0.254	0.330E+03
0.275	0.100E+03
0.277	0.600E+02
0.369	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	17.1	0.171
2.00	18.5	0.015
3.00	19.5	0.009
4.00	20.3	0.007
5.00	20.9	0.006
6.00	21.4	0.005
7.00	21.8	0.005
8.00	22.2	0.004
9.00	22.6	0.004
10.00	22.9	0.003
20.00	25.3	0.024
30.00	26.9	0.016
40.00	28.0	0.012
50.00	28.9	0.009
60.00	29.5	0.006
70.00	29.9	0.004
80.00	30.2	0.003
90.00	30.5	0.003
100.00	30.8	0.003
200.00	34.3	0.035
300.00	44.4	0.102
400.00	59.7	0.152
500.00	71.0	0.113
600.00	79.3	0.083
700.00	86.4	0.071
800.00	91.8	0.054
900.00	95.5	0.037
1000.00	97.6	0.021
2000.00	100.0	0.024

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.045	0.15748E+06
0.093	0.64570E+05
0.097	0.36323E+05
0.100	0.23613E+05
0.103	0.16733E+05
0.105	0.12557E+05
0.107	0.98174E+04
0.109	0.79146E+04
0.111	0.65347E+04
0.117	0.46278E+04
0.127	0.19202E+04
0.134	0.10686E+04
0.139	0.68091E+03
0.142	0.46254E+03
0.145	0.33102E+03
0.146	0.25327E+03
0.148	0.20413E+03
0.149	0.17084E+03
0.158	0.13394E+03
0.192	0.73668E+02
0.253	0.46908E+02
0.318	0.29877E+02
0.366	0.20561E+02
0.403	0.15353E+02
0.434	0.11649E+02
0.456	0.88972E+01
0.470	0.66937E+01
0.481	0.33608E+01

ALPHA = 1.38



SOIL HORIZON NUMBER 82 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.38 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.138	0.150E+05
0.149	0.600E+04
0.166	0.200E+04
0.192	0.100E+04
0.218	0.330E+03
0.255	0.100E+03
0.262	0.600E+02
0.368	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	12.9	0.129
2.00	14.6	0.017
3.00	15.6	0.010
4.00	16.4	0.007
5.00	16.9	0.006
6.00	17.4	0.005
7.00	17.8	0.004
8.00	18.2	0.004
9.00	18.5	0.003
10.00	18.7	0.003
20.00	20.6	0.019
30.00	21.7	0.011
40.00	22.5	0.008
50.00	23.1	0.006
60.00	23.6	0.005
70.00	24.1	0.005
80.00	24.5	0.004
90.00	24.9	0.004
100.00	25.2	0.003
200.00	30.7	0.055
300.00	42.3	0.116
400.00	61.5	0.193
500.00	74.7	0.132
600.00	82.9	0.082
700.00	89.6	0.066
800.00	94.3	0.048
900.00	97.2	0.029
1000.00	98.5	0.013
2000.00	100.0	0.015

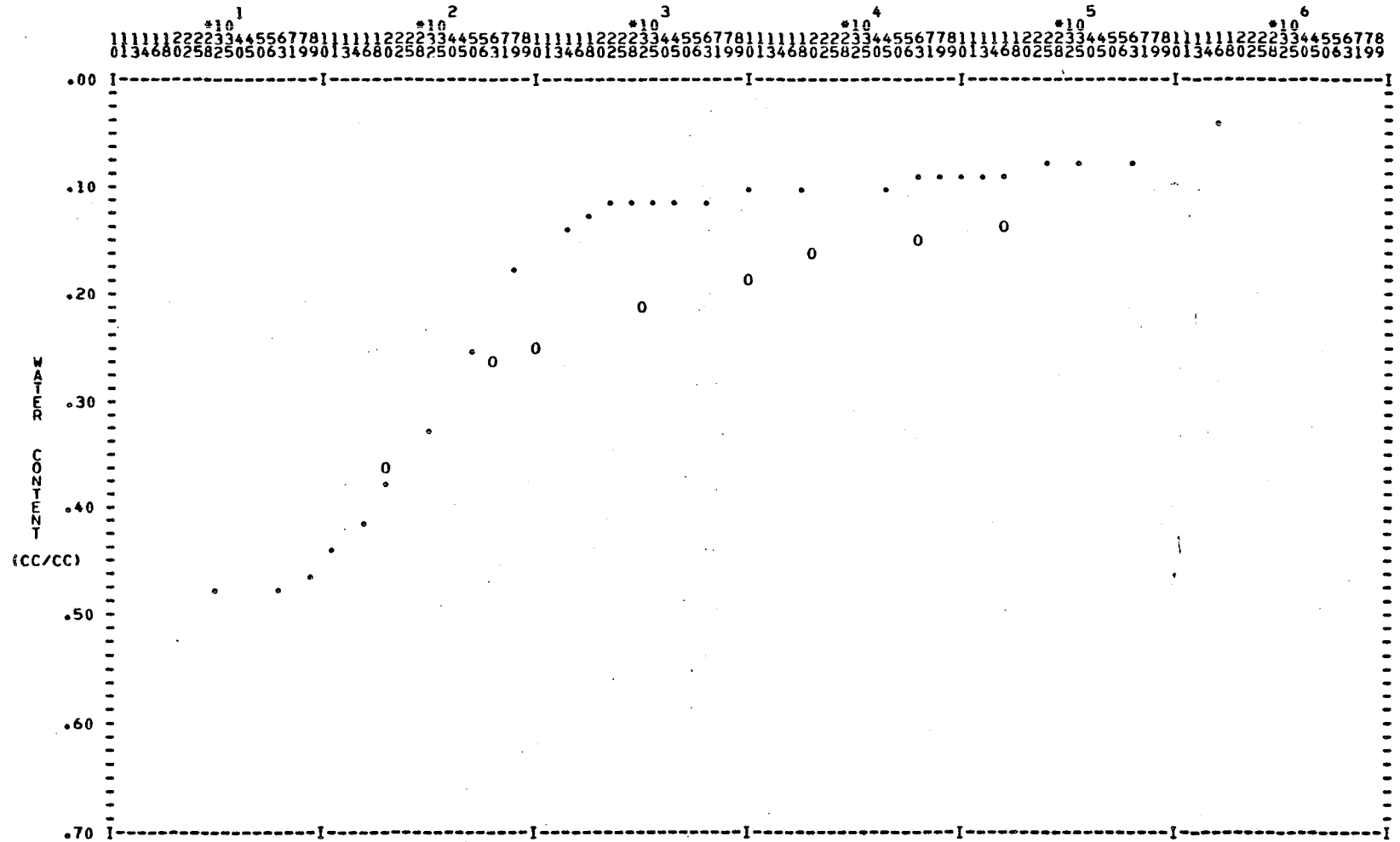
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.035	0.16422E+06
0.072	0.66669E+05
0.077	0.36929E+05
0.080	0.23763E+05
0.082	0.16713E+05
0.084	0.12469E+05
0.086	0.97017E+04
0.088	0.77899E+04
0.089	0.64096E+04
0.094	0.44873E+04
0.101	0.18224E+04
0.106	0.10073E+04
0.109	0.64699E+03
0.112	0.45826E+03
0.114	0.34534E+03
0.116	0.26973E+03
0.118	0.21661E+03
0.120	0.17780E+03
0.134	0.14839E+03
0.175	0.76627E+02
0.249	0.49799E+02
0.326	0.31216E+02
0.378	0.20836E+02
0.413	0.15384E+02
0.441	0.11533E+02
0.459	0.86408E+01
0.469	0.61839E+01
0.476	0.31205E+01

ALPHA = 1.38

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SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 82

0 MEASURED :      . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.74860E+01

SOIL HORIZON NUMBER 83 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.37 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.123	0.150E+05
0.137	0.600E+04
0.145	0.200E+04
0.189	0.100E+04
0.212	0.330E+03
0.240	0.100E+03
0.252	0.600E+02
0.362	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	10.7	0.107
2.00	11.4	0.007
3.00	11.9	0.005
4.00	12.2	0.004
5.00	12.6	0.003
6.00	12.8	0.003
7.00	13.1	0.002
8.00	13.3	0.002
9.00	13.5	0.002
10.00	13.7	0.002
20.00	15.1	0.014
30.00	16.0	0.010
40.00	16.8	0.007
50.00	17.3	0.005
60.00	17.7	0.004
70.00	18.0	0.003
80.00	18.3	0.003
90.00	18.5	0.002
100.00	18.7	0.002
200.00	23.0	0.043
300.00	25.0	0.020
400.00	25.4	0.005
500.00	26.8	0.014
600.00	28.0	0.012
700.00	28.6	0.006
800.00	29.2	0.006
900.00	29.5	0.003
1000.00	29.7	0.002
2000.00	100.0	0.021

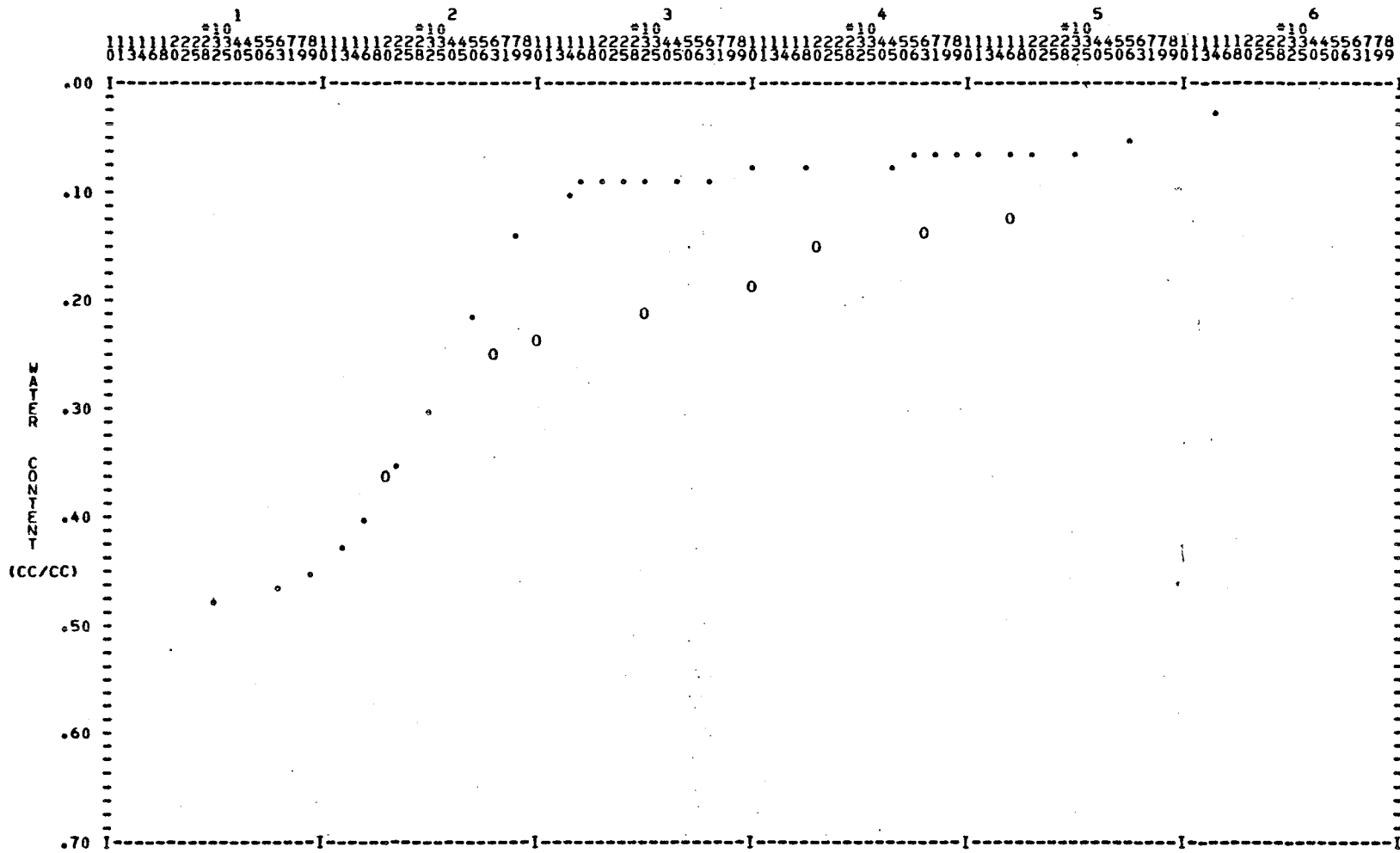
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.028	0.13912E+06
0.056	0.57115E+05
0.058	0.32246E+05
0.060	0.21042E+05
0.061	0.14965E+05
0.063	0.11265E+05
0.064	0.88322E+04
0.065	0.71389E+04
0.066	0.59084E+04
0.070	0.42381E+04
0.075	0.17804E+04
0.079	0.97929E+03
0.082	0.62686E+03
0.085	0.43255E+03
0.086	0.31604E+03
0.088	0.24393E+03
0.089	0.19611E+03
0.090	0.16258E+03
0.101	0.14040E+03
0.140	0.76647E+02
0.216	0.49529E+02
0.297	0.31340E+02
0.354	0.21316E+02
0.397	0.15856E+02
0.431	0.11059E+02
0.455	0.90298E+01
0.468	0.65911E+01
0.478	0.33014E+01

ALPHA = 1.38



SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 83

0 MEASURED :

• PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.80738E+01

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SOIL HORIZON NUMBER 84 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.17 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.087	0.150E+05
0.096	0.600E+04
0.123	0.200E+04
0.199	0.100E+04
0.225	0.330E+03
0.238	0.100E+03
0.256	0.600E+02
0.438	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

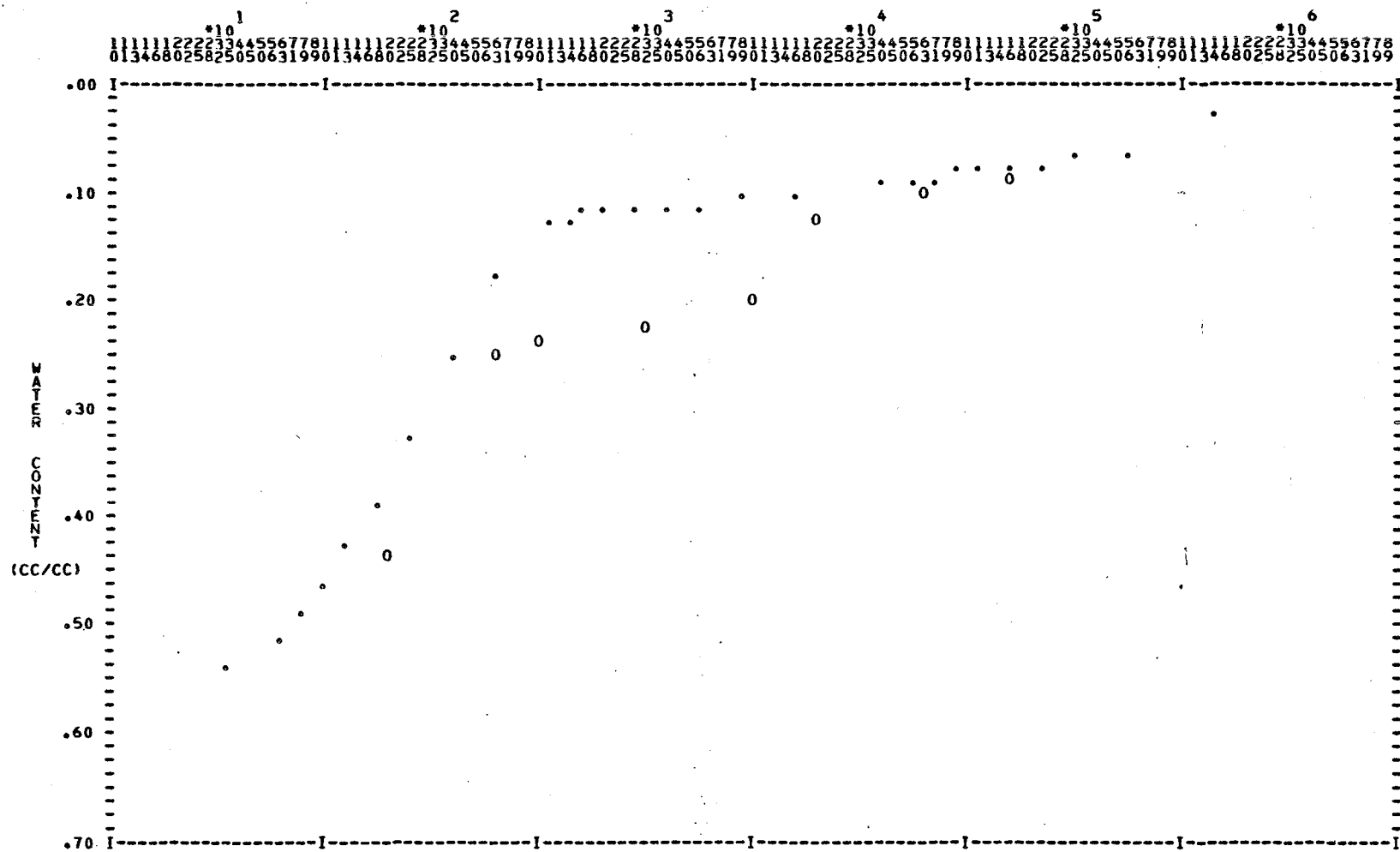
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	7.9	0.079
2.00	9.9	0.020
3.00	11.1	0.012
4.00	11.1	0.009
5.00	11.1	0.008
6.00	11.1	0.006
7.00	11.1	0.005
8.00	11.1	0.005
9.00	11.1	0.004
10.00	11.1	0.004
20.00	17.4	0.022
30.00	18.6	0.012
40.00	19.4	0.008
50.00	20.0	0.006
60.00	20.4	0.004
70.00	20.7	0.003
80.00	21.0	0.002
90.00	21.2	0.002
100.00	21.4	0.002
200.00	25.2	0.038
400.00	36.6	0.115
600.00	42.0	0.053
800.00	44.9	0.029
1000.00	47.3	0.024
2000.00	80.3	0.070
	85.8	0.055
	90.1	0.042
	93.1	0.030
	100.0	0.069

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.028	0.14407E+06
0.059	0.59022E+06
0.065	0.33044E+06
0.070	0.21345E+06
0.073	0.15026E+06
0.077	0.11204E+06
0.079	0.87044E+04
0.082	0.69748E+04
0.084	0.57251E+04
0.091	0.39509E+04
0.100	0.15706E+04
0.106	0.86420E+03
0.110	0.55419E+03
0.113	0.37846E+03
0.115	0.27025E+03
0.116	0.20666E+03
0.118	0.16666E+03
0.119	0.13973E+03
0.130	0.11776E+03
0.173	0.65255E+02
0.250	0.41114E+02
0.329	0.26151E+02
0.386	0.17839E+02
0.429	0.13252E+02
0.464	0.10132E+02
0.491	0.79032E+01
0.511	0.62382E+01
0.539	0.35569E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 85 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.26 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.091	0.150E+05
0.102	0.600E+04
0.130	0.200E+04
0.213	0.100E+04
0.255	0.330E+03
0.340	0.100E+03
0.352	0.600E+02
0.370	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	10.8	0.108
2.00	12.9	0.020
3.00	14.1	0.012
4.00	15.1	0.010
5.00	15.9	0.008
6.00	16.6	0.007
7.00	17.4	0.006
8.00	17.7	0.005
9.00	18.1	0.004
10.00	18.5	0.004
20.00	20.7	0.022
30.00	21.8	0.011
40.00	22.6	0.008
50.00	23.0	0.006
60.00	23.7	0.005
70.00	24.1	0.004
80.00	24.4	0.003
90.00	24.7	0.003
100.00	25.0	0.003
200.00	28.8	0.038
300.00	29.4	0.106
400.00	34.5	0.151
500.00	35.6	0.111
600.00	73.3	0.077
700.00	79.7	0.064
800.00	84.8	0.051
900.00	88.8	0.040
1000.00	91.0	0.031
2000.00	100.0	0.081

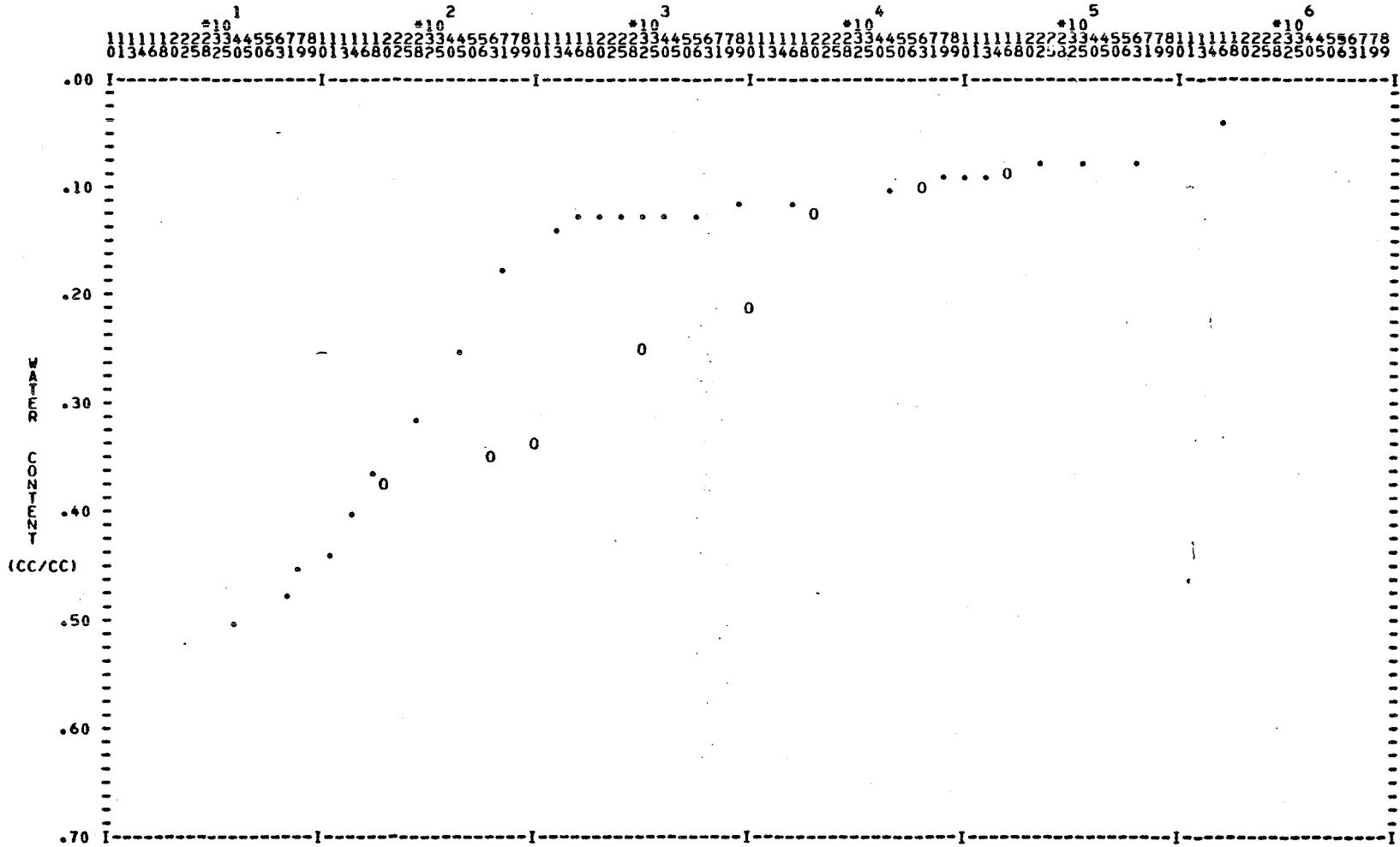
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.034	0.15390E+06
0.070	0.63516E+05
0.076	0.35844E+05
0.081	0.23220E+05
0.085	0.16350E+05
0.088	0.12196E+05
0.091	0.94673E+04
0.094	0.75769E+04
0.096	0.62101E+04
0.103	0.42435E+04
0.111	0.16664E+04
0.116	0.91939E+03
0.120	0.59019E+03
0.123	0.41275E+03
0.125	0.30591E+03
0.127	0.23735E+03
0.129	0.19053E+03
0.130	0.15700E+03
0.141	0.12625E+03
0.179	0.68851E+02
0.246	0.43428E+02
0.315	0.27602E+02
0.364	0.18789E+02
0.401	0.13946E+02
0.431	0.10689E+02
0.455	0.83872E+01
0.474	0.66891E+01
0.503	0.39266E+01

ALPHA = 1.38

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SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 85

0 MEASURED 1 . PREDICTED

SUM OF (ABS(LOG(P<sub>SIM</sub>)-LOG(P<sub>SIP</sub>))) = 0.4704E+01

SOIL HORIZON NUMBER 86 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.29 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.178	0.150E+05
0.191	0.500E+04
0.223	0.500E+04
0.268	0.500E+04
0.298	0.330E+03
0.341	0.100E+03
0.355	0.500E+02
0.384	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	20.4	0.204
2.00	22.0	0.016
3.00	33.1	0.011
4.00	33.9	0.008
5.00	44.6	0.007
6.00	55.2	0.006
7.00	55.7	0.005
8.00	66.1	0.004
9.00	66.5	0.004
10.00	66.8	0.003
20.00	88.7	0.019
30.00	90.6	0.009
40.00	90.2	0.006
50.00	90.7	0.005
60.00	11.2	0.005
70.00	11.6	0.005
80.00	22.1	0.004
90.00	22.5	0.004
100.00	22.8	0.003
200.00	35.5	0.027
300.00	45.0	0.095
400.00	57.0	0.119
500.00	66.0	0.090
600.00	72.6	0.066
700.00	78.1	0.055
800.00	82.8	0.046
900.00	86.7	0.039
1000.00	90.0	0.033
2000.00	100.0	0.100

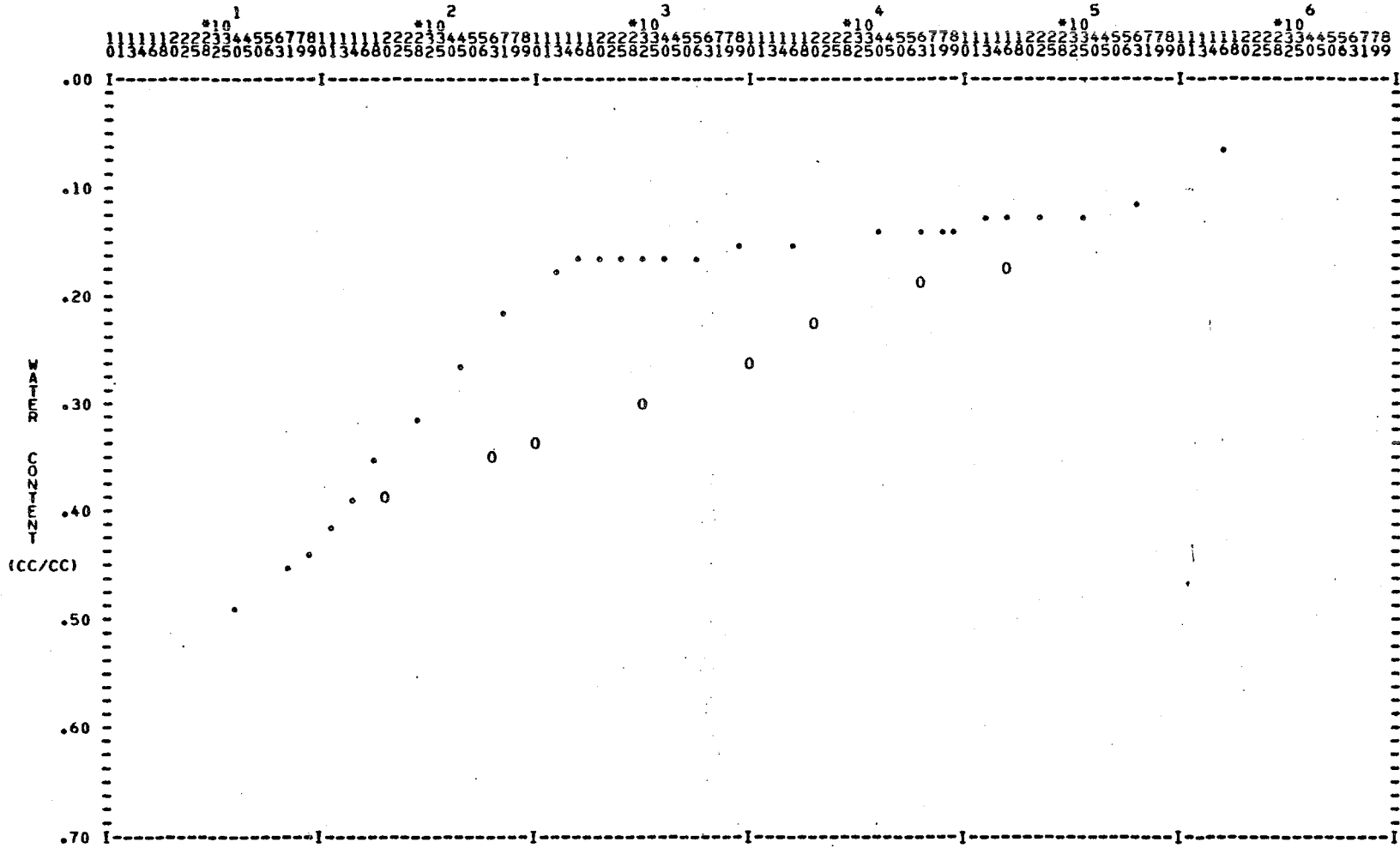
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.056	0.15155E+06
0.116	0.2699E+05
0.120	0.35484E+05
0.124	0.23017E+05
0.128	0.16230E+05
0.130	0.12104E+05
0.133	0.93992E+04
0.135	0.75241E+04
0.137	0.61676E+04
0.142	0.42144E+04
0.150	0.16356E+04
0.153	0.89694E+03
0.156	0.58123E+03
0.159	0.42099E+03
0.161	0.32280E+03
0.164	0.25383E+03
0.166	0.20408E+03
0.167	0.16712E+03
0.175	0.12137E+03
0.207	0.68961E+02
0.262	0.42474E+02
0.315	0.27159E+02
0.356	0.18670E+02
0.387	0.13883E+02
0.413	0.10728E+02
0.435	0.85337E+01
0.453	0.69425E+01
0.488	0.41807E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 86

0 MEASURED :      . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.91917E+01

SOIL HORIZON NUMBER 87 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.33 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.218	0.150E+05
0.235	0.600E+04
0.255	0.200E+04
0.342	0.100E+04
0.356	0.330E+03
0.370	0.100E+03
0.376	0.600E+02
0.399	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	26.9	0.269
2.00	28.6	0.017
3.00	29.6	0.010
4.00	30.4	0.008
5.00	31.0	0.006
6.00	31.5	0.005
7.00	32.0	0.004
8.00	32.3	0.004
9.00	32.7	0.003
10.00	33.0	0.003
20.00	35.0	0.020
30.00	36.2	0.012
40.00	37.1	0.009
50.00	37.8	0.007
60.00	38.4	0.006
70.00	39.1	0.006
80.00	39.5	0.006
90.00	40.2	0.005
100.00	40.6	0.004
200.00	44.3	0.039
300.00	52.2	0.078
400.00	64.0	0.117
500.00	72.6	0.086
600.00	78.4	0.058
700.00	83.0	0.048
800.00	87.0	0.039
900.00	90.1	0.031
1000.00	92.5	0.024
2000.00	100.0	0.075

PREDICTED MOISTURE CHARACTERISTIC DATA

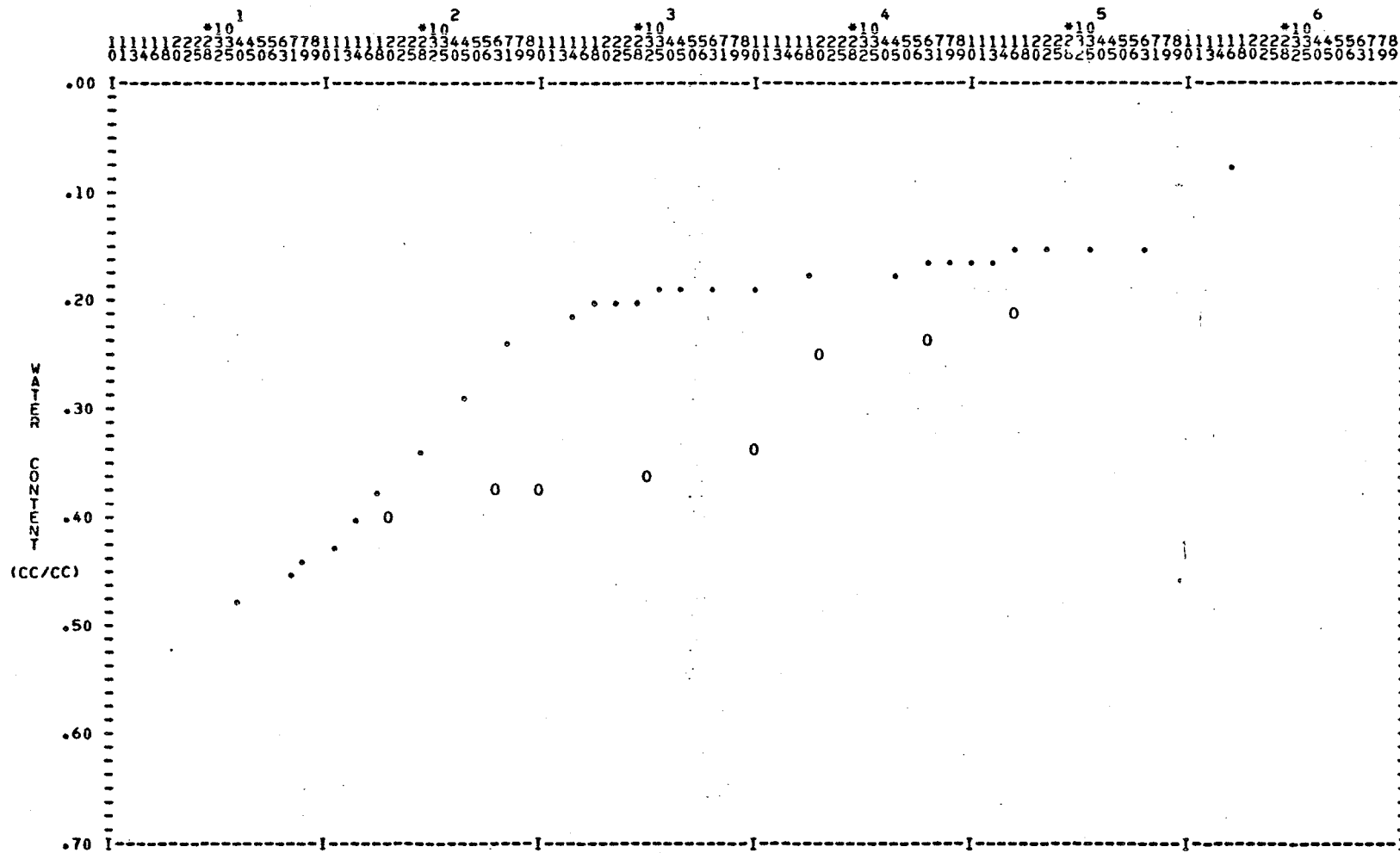
SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.071	0.15862E+06
0.145	0.64533E+05
0.150	0.35865E+05
0.153	0.23123E+05
0.156	0.16288E+05
0.158	0.12165E+05
0.160	0.94734E+04
0.161	0.76117E+04
0.162	0.62063E+04
0.163	0.49393E+04
0.164	0.37891E+04
0.165	0.29178E+04
0.166	0.23355E+04
0.167	0.18910E+04
0.168	0.15145E+04
0.169	0.11849E+04
0.170	0.92761E+03
0.171	0.73398E+03
0.172	0.58495E+03
0.173	0.48362E+03
0.174	0.37658E+03
0.175	0.28759E+03
0.176	0.18906E+03
0.177	0.10673E+03
0.178	0.84055E+02
0.179	0.67467E+02
0.180	0.40797E+02

ALPHA = 1.38

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SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 88 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.51 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.214	0.150E+05
0.231	0.600E+04
0.270	0.200E+04
0.337	0.100E+04
0.346	0.330E+03
0.355	0.100E+03
0.361	0.600E+02
0.370	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

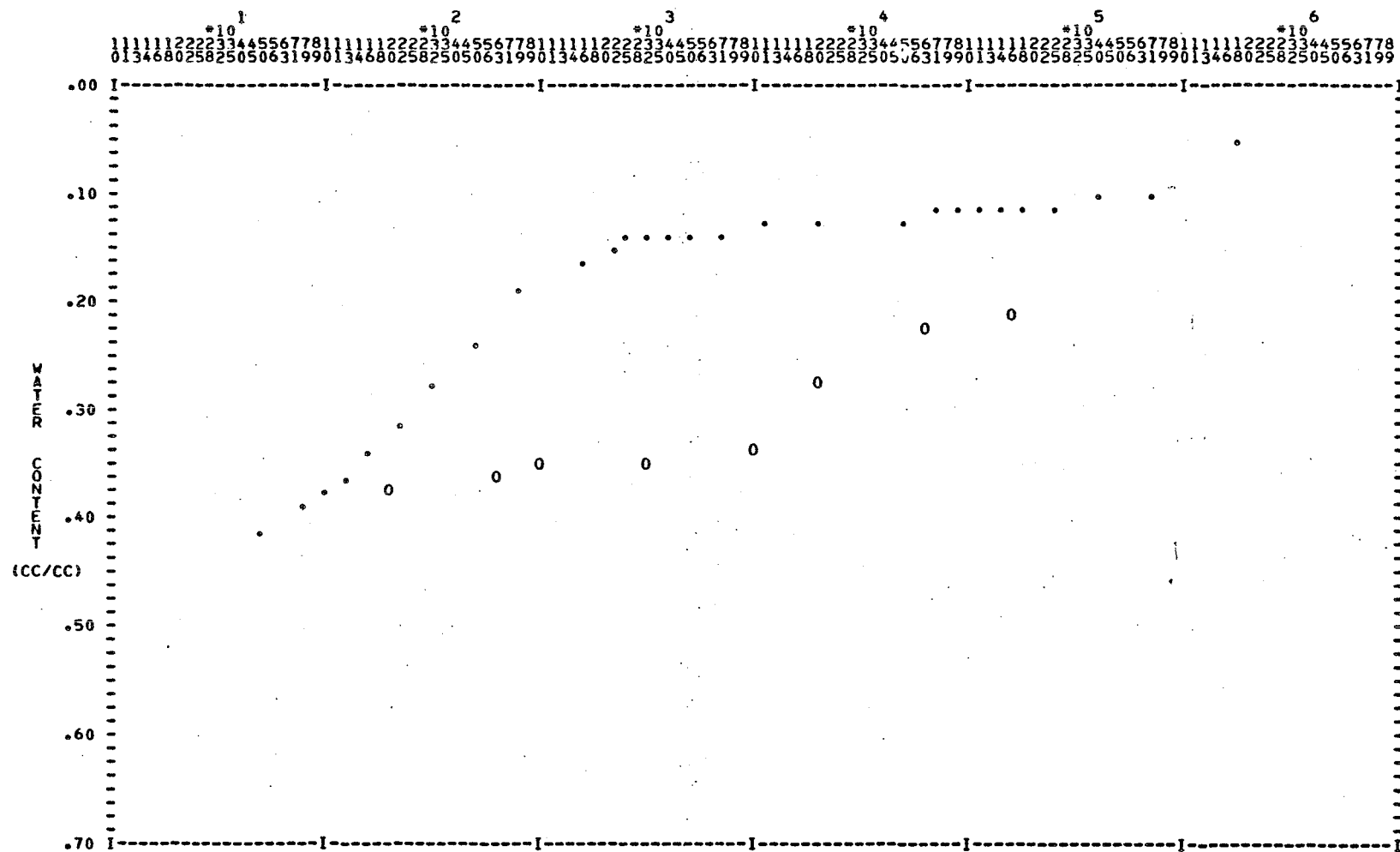
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	21.0	0.210
2.00	22.7	0.017
3.00	23.7	0.010
4.00	24.5	0.007
5.00	25.0	0.006
6.00	25.5	0.005
7.00	25.9	0.004
8.00	26.2	0.003
9.00	26.5	0.003
10.00	26.8	0.003
20.00	28.6	0.018
30.00	29.7	0.011
40.00	30.4	0.008
50.00	31.0	0.006
60.00	31.6	0.006
70.00	32.3	0.007
80.00	33.0	0.007
90.00	33.6	0.006
100.00	34.1	0.005
200.00	38.6	0.045
300.00	47.6	0.090
400.00	60.1	0.125
500.00	69.3	0.092
600.00	75.6	0.063
700.00	80.8	0.052
800.00	85.0	0.042
900.00	88.4	0.034
1000.00	91.2	0.028
2000.00	100.0	0.088

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.049	0.18155E+06
0.100	0.73660E+05
0.104	0.40753E+05
0.106	0.26198E+05
0.109	0.18410E+05
0.111	0.13725E+05
0.112	0.10672E+05
0.113	0.85643E+04
0.115	0.70431E+04
0.119	0.49209E+04
0.120	0.19953E+04
0.122	0.11037E+04
0.132	0.70948E+03
0.135	0.52337E+03
0.138	0.41111E+03
0.140	0.32257E+03
0.143	0.22621E+03
0.146	0.21403E+03
0.156	0.15796E+03
0.180	0.80651E+02
0.200	0.55065E+02
0.220	0.32184E+02
0.222	0.21860E+02
0.233	0.16206E+02
0.257	0.12245E+02
0.273	0.98330E+01
0.386	0.79233E+01
0.411	0.48219E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 88

0 MEASURED ;

• PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.11273E+02

SOIL HORIZON NUMBER 89 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.23 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.059	0.150E+05
0.075	0.600E+04
0.100	0.200E+04
0.159	0.100E+04
0.200	0.330E+03
0.244	0.100E+03
0.305	0.600E+02
0.413	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

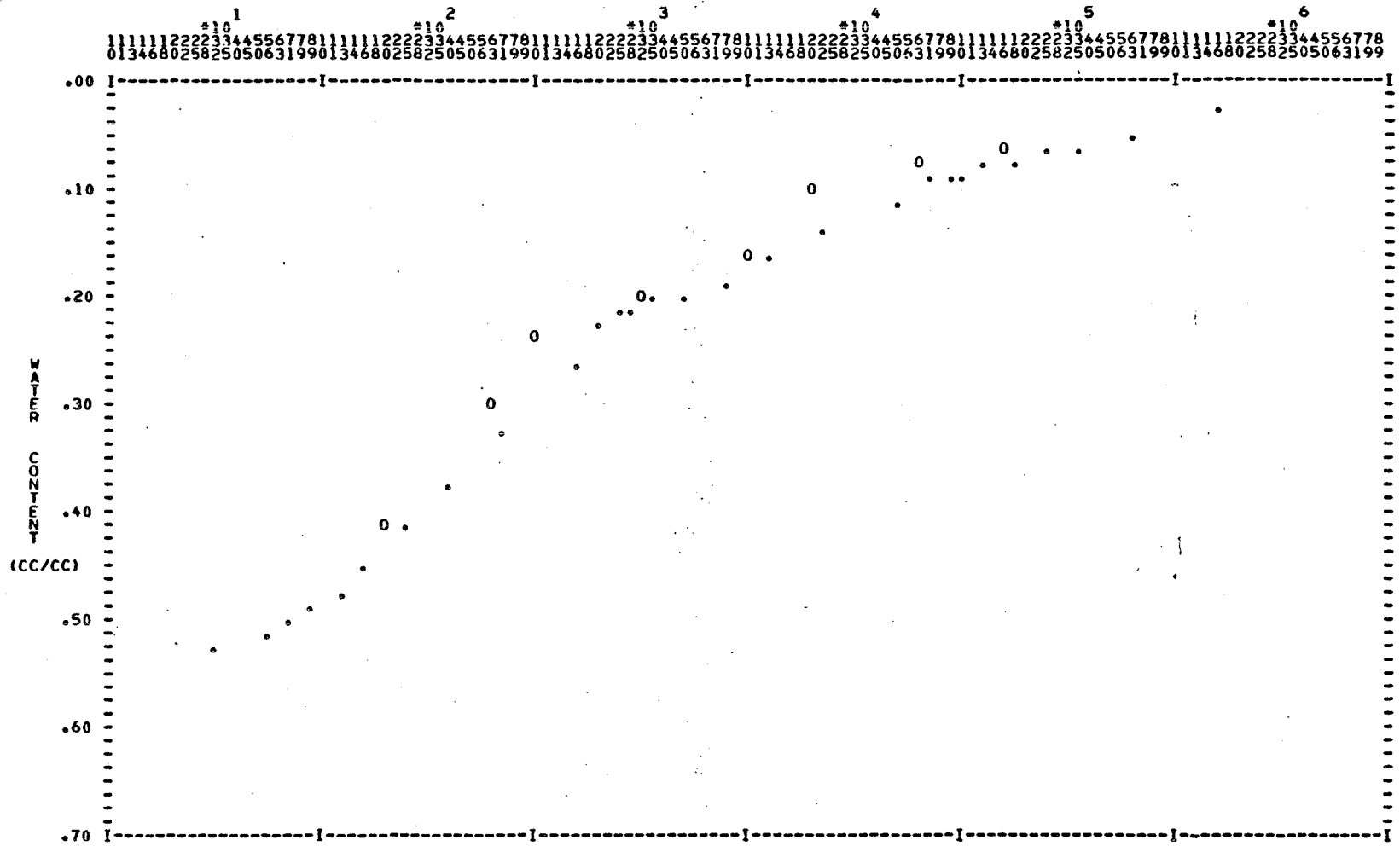
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	6.5	0.065
2.00	8.5	0.023
3.00	10.3	0.013
4.00	11.6	0.013
5.00	12.8	0.012
6.00	13.9	0.011
7.00	14.9	0.010
8.00	15.8	0.009
9.00	16.6	0.008
10.00	17.5	0.008
20.00	23.9	0.064
30.00	29.0	0.051
40.00	33.0	0.040
50.00	35.8	0.028
60.00	37.6	0.018
70.00	38.9	0.013
80.00	40.1	0.011
90.00	41.2	0.011
100.00	42.4	0.012
200.00	55.0	0.126
300.00	66.0	0.106
400.00	74.0	0.086
500.00	81.0	0.063
600.00	85.0	0.047
700.00	89.0	0.037
800.00	92.0	0.028
900.00	94.6	0.025
1000.00	96.1	0.015
2000.00	100.0	0.039

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.02	0.15492E+06
0.051	0.64244E+06
0.059	0.36853E+06
0.066	0.24309E+06
0.072	0.17205E+06
0.077	0.13200E+06
0.082	0.10402E+05
0.087	0.84432E+04
0.091	0.70125E+04
0.111	0.50724E+04
0.142	0.21771E+04
0.166	0.12229E+04
0.184	0.77302E+03
0.197	0.51984E+03
0.205	0.37382E+03
0.213	0.29090E+03
0.218	0.23933E+03
0.224	0.20382E+03
0.263	0.15662E+03
0.277	0.67246E+02
0.378	0.38172E+02
0.418	0.24259E+02
0.448	0.16733E+02
0.470	0.12296E+02
0.488	0.93402E+01
0.501	0.72587E+01
0.511	0.57202E+01
0.525	0.33407E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 89

0 MEASURED :      • PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.20857E+01

SOIL HORIZON NUMBER 90 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.09 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.038	0.150E+05
0.043	0.600E+04
0.071	0.200E+04
0.244	0.100E+04
0.276	0.330E+03
0.311	0.100E+03
0.378	0.600E+02
0.464	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

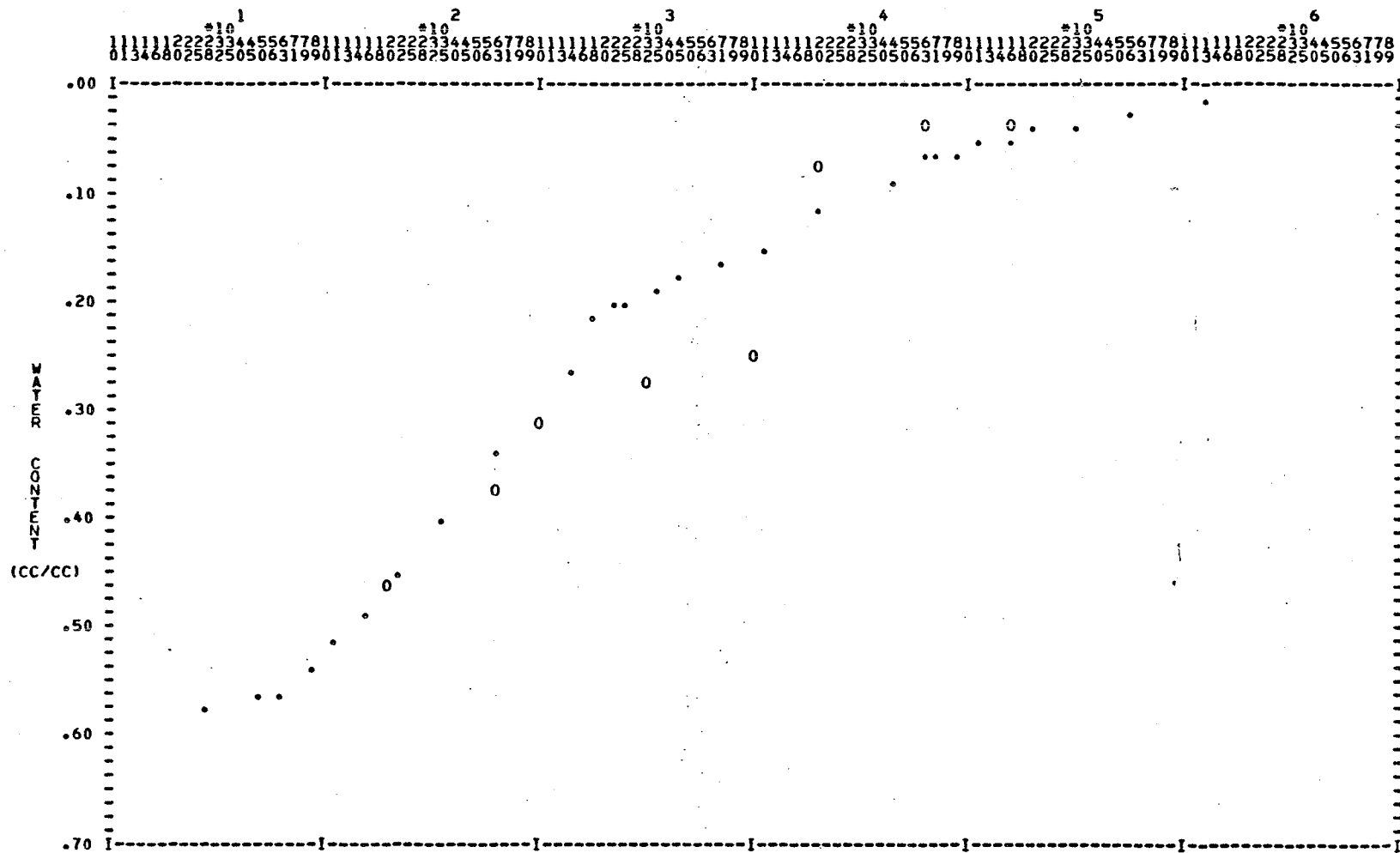
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	2.7	0.027
2.00	4.5	0.018
3.00	5.7	0.012
4.00	6.7	0.011
5.00	7.7	0.010
6.00	8.6	0.009
7.00	9.4	0.008
8.00	10.2	0.008
9.00	11.0	0.008
10.00	11.7	0.007
20.00	17.7	0.060
30.00	22.6	0.049
40.00	26.4	0.038
50.00	29.2	0.028
60.00	31.1	0.019
70.00	32.4	0.013
80.00	33.3	0.010
90.00	34.7	0.014
100.00	36.0	0.013
200.00	51.1	0.151
300.00	63.3	0.122
400.00	73.3	0.099
500.00	80.6	0.072
600.00	85.5	0.054
700.00	90.0	0.044
800.00	93.4	0.033
900.00	95.7	0.022
1000.00	97.1	0.014
2000.00	100.0	0.029

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.013	0.13307E+06
0.030	0.55140E+05
0.037	0.31715E+05
0.043	0.21010E+05
0.048	0.15122E+05
0.053	0.11497E+05
0.058	0.90881E+04
0.062	0.73969E+04
0.067	0.61587E+04
0.087	0.44932E+04
0.119	0.19396E+04
0.144	0.10910E+04
0.164	0.69194E+03
0.177	0.46770E+03
0.187	0.33797E+03
0.194	0.26351E+03
0.201	0.21663E+03
0.208	0.18415E+03
0.217	0.14462E+03
0.338	0.62062E+02
0.433	0.35101E+02
0.490	0.22317E+02
0.590	0.15443E+02
0.591	0.11353E+02
0.597	0.85807E+01
0.597	0.55916E+01
0.580	0.50769E+01
0.580	0.28362E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 90

0 MEASURED ;

• PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.27645E+01

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SOIL HORIZON NUMBER 91 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.51 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.074	0.150E+05
0.098	0.600E+04
0.125	0.200E+04
0.177	0.100E+04
0.202	0.330E+03
0.239	0.100E+03
0.263	0.600E+02
0.338	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	9.8	0.098
2.00	12.3	0.025
3.00	14.0	0.017
4.00	15.4	0.014
5.00	16.7	0.013
6.00	17.8	0.011
7.00	18.8	0.010
8.00	19.8	0.009
9.00	20.7	0.009
10.00	21.5	0.008
20.00	27.8	0.063
30.00	32.7	0.049
40.00	36.5	0.038
50.00	39.2	0.027
60.00	40.9	0.017
70.00	42.0	0.011
80.00	43.0	0.010
90.00	43.9	0.010
100.00	45.0	0.011
200.00	56.1	0.111
300.00	65.7	0.096
400.00	73.5	0.078
500.00	79.4	0.059
600.00	84.0	0.048
700.00	87.7	0.038
800.00	90.8	0.031
900.00	93.2	0.025
1000.00	95.2	0.020
2000.00	100.0	0.048

PREDICTED MOISTURE CHARACTERISTIC DATA

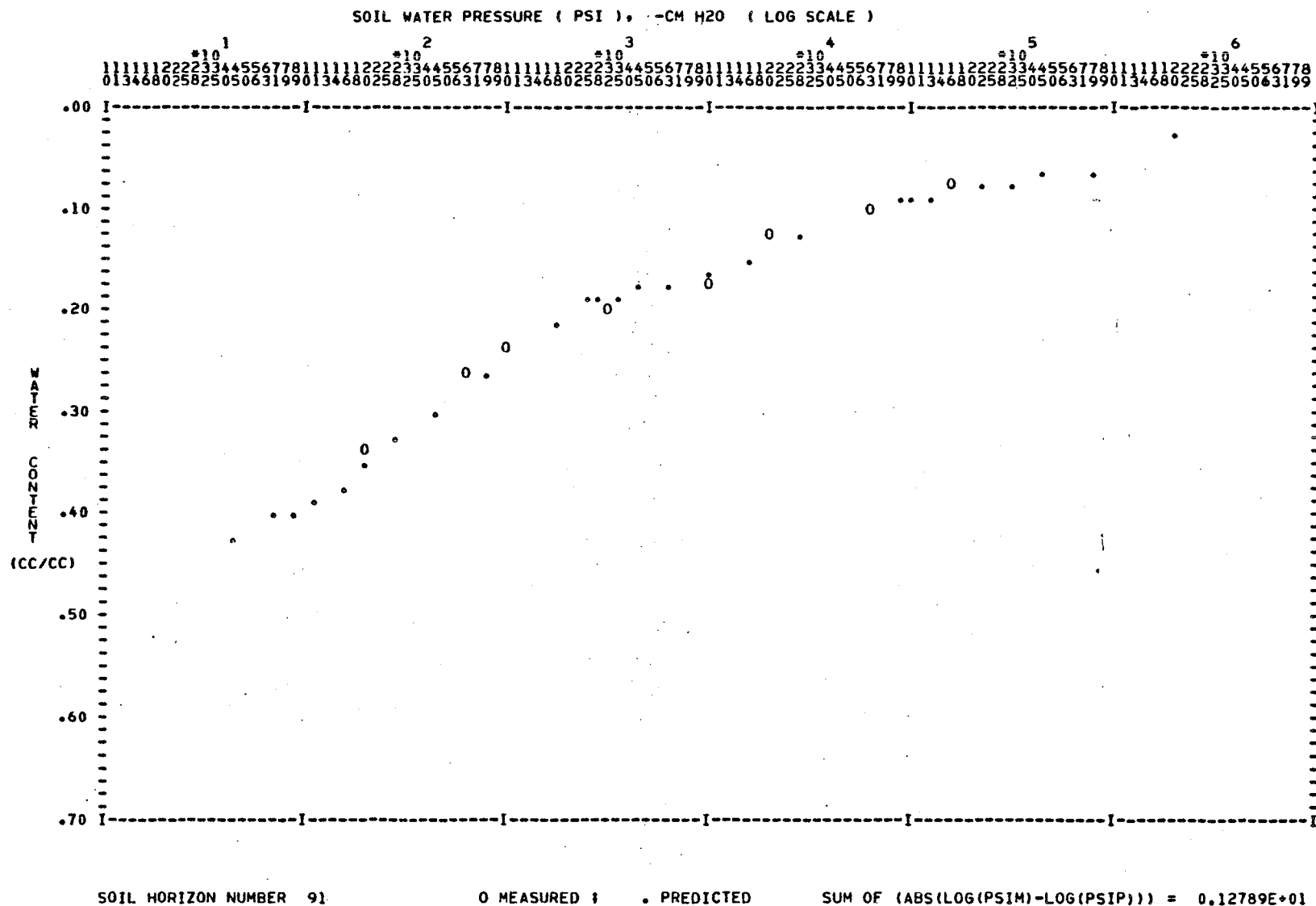
SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.026	0.19508E+06
0.057	0.80901E+05
0.063	0.46314E+05
0.069	0.30465E+05
0.074	0.21788E+05
0.079	0.16460E+05
0.083	0.12944E+05
0.087	0.10488E+05
0.091	0.86950E+04
0.106	0.62499E+04
0.130	0.26734E+04
0.149	0.15008E+04
0.163	0.94533E+03
0.172	0.63134E+03
0.178	0.45033E+03
0.183	0.34928E+03
0.187	0.28777E+03
0.191	0.24581E+03
0.212	0.18726E+03
0.226	0.81680E+02
0.239	0.46950E+02
0.251	0.29957E+02
0.259	0.20577E+02
0.269	0.15345E+02
0.284	0.11708E+02
0.296	0.92307E+01
0.405	0.74244E+01
0.420	0.42973E+01

ALPHA = 1.38



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SOIL HORIZON NUMBER 92 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.65 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.066	0.150E+05
0.081	0.600E+04
0.068	0.200E+04
0.135	0.100E+04
0.160	0.330E+03
0.193	0.100E+03
0.213	0.600E+02
0.317	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	16.4	0.164
2.00	18.3	0.019
3.00	19.5	0.012
4.00	20.5	0.010
5.00	21.5	0.009
6.00	22.4	0.009
7.00	23.2	0.008
8.00	23.9	0.008
9.00	24.6	0.007
10.00	25.3	0.007
20.00	31.0	0.057
30.00	35.5	0.045
40.00	39.0	0.035
50.00	41.5	0.025
60.00	43.2	0.017
70.00	44.6	0.013
80.00	45.7	0.011
90.00	46.8	0.011
100.00	47.9	0.011
200.00	59.4	0.115
300.00	68.8	0.094
400.00	76.7	0.079
500.00	82.5	0.058
600.00	86.9	0.044
700.00	90.5	0.035
800.00	93.2	0.027
900.00	95.2	0.020
1000.00	96.7	0.015
2000.00	100.0	0.033

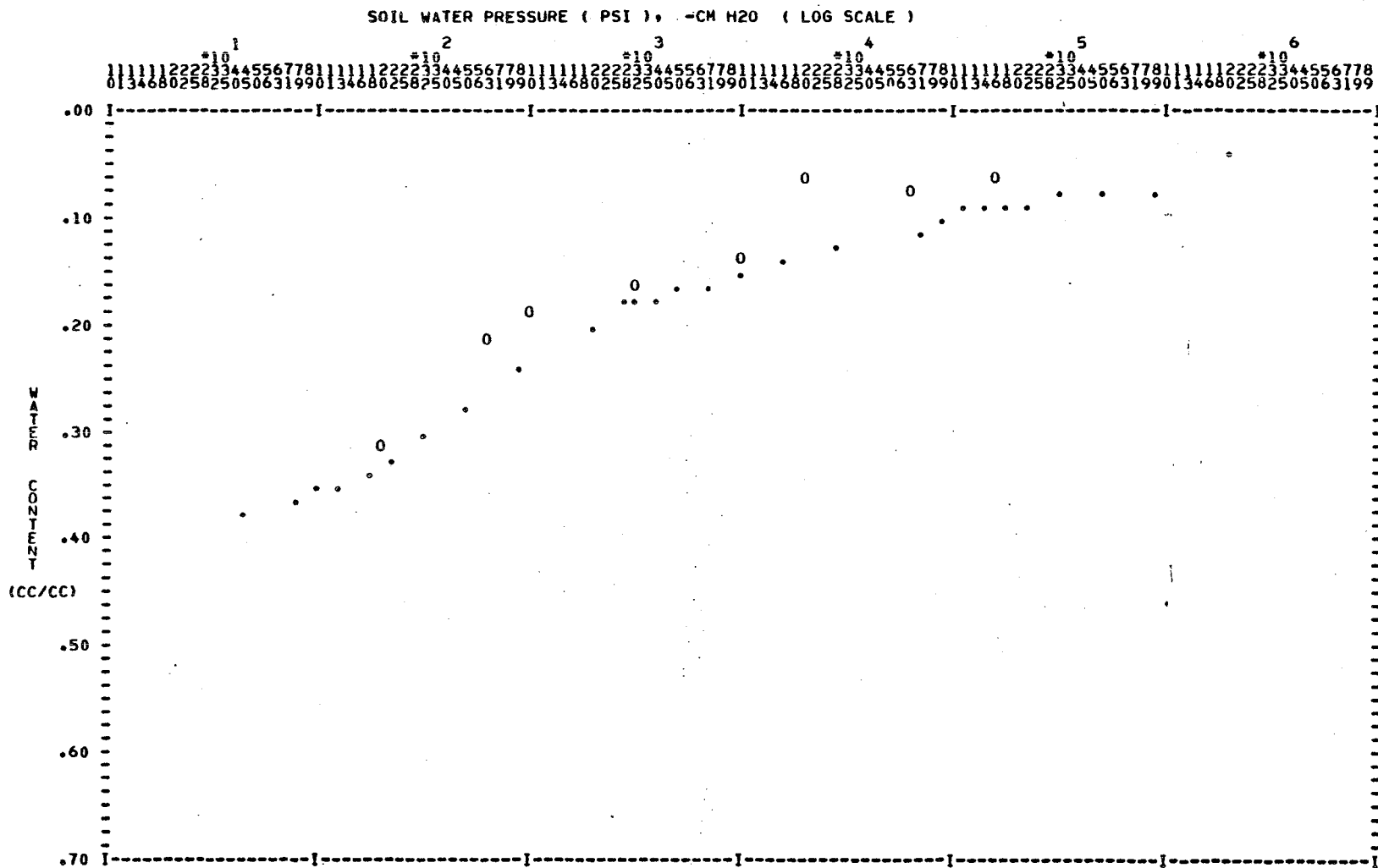
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.035	0.20525E+06
0.071	0.84855E+05
0.076	0.48637E+05
0.079	0.32148E+05
0.083	0.23103E+05
0.086	0.17545E+05
0.089	0.13858E+05
0.092	0.11272E+05
0.094	0.93800E+04
0.106	0.68325E+04
0.126	0.29351E+04
0.141	0.16458E+04
0.152	0.10433E+04
0.160	0.71077E+03
0.166	0.51839E+03
0.170	0.40301E+03
0.175	0.32799E+03
0.179	0.27558E+03
0.202	0.21032E+03
0.242	0.90873E+02
0.275	0.51741E+02
0.300	0.32936E+02
0.320	0.22806E+02
0.335	0.16826E+02
0.347	0.12804E+02
0.356	0.99529E+01
0.362	0.78310E+01
0.371	0.44667E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 92

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P<sub>SI</sub>M)-LOG(P<sub>SI</sub>P))) = 0.46706E+01

SOIL HORIZON NUMBER 93 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.70 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.146	0.150E+05
0.155	0.600E+04
0.158	0.200E+04
0.170	0.100E+04
0.189	0.330E+03
0.204	0.100E+03
0.250	0.600E+02
0.304	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	26.4	0.264
2.00	27.2	0.008
3.00	27.7	0.005
4.00	28.1	0.004
5.00	28.5	0.004
6.00	28.8	0.003
7.00	29.1	0.003
8.00	29.3	0.003
9.00	29.6	0.002
10.00	29.8	0.002
20.00	31.4	0.016
30.00	32.5	0.011
40.00	33.3	0.008
50.00	34.0	0.007
60.00	34.6	0.006
70.00	35.1	0.005
80.00	35.6	0.005
90.00	36.0	0.004
100.00	36.4	0.004
200.00	43.1	0.067
300.00	53.9	0.104
400.00	64.6	0.111
500.00	72.7	0.081
600.00	78.4	0.057
700.00	83.1	0.047
800.00	86.9	0.038
900.00	89.9	0.030
1000.00	92.3	0.024
2000.00	100.0	0.077

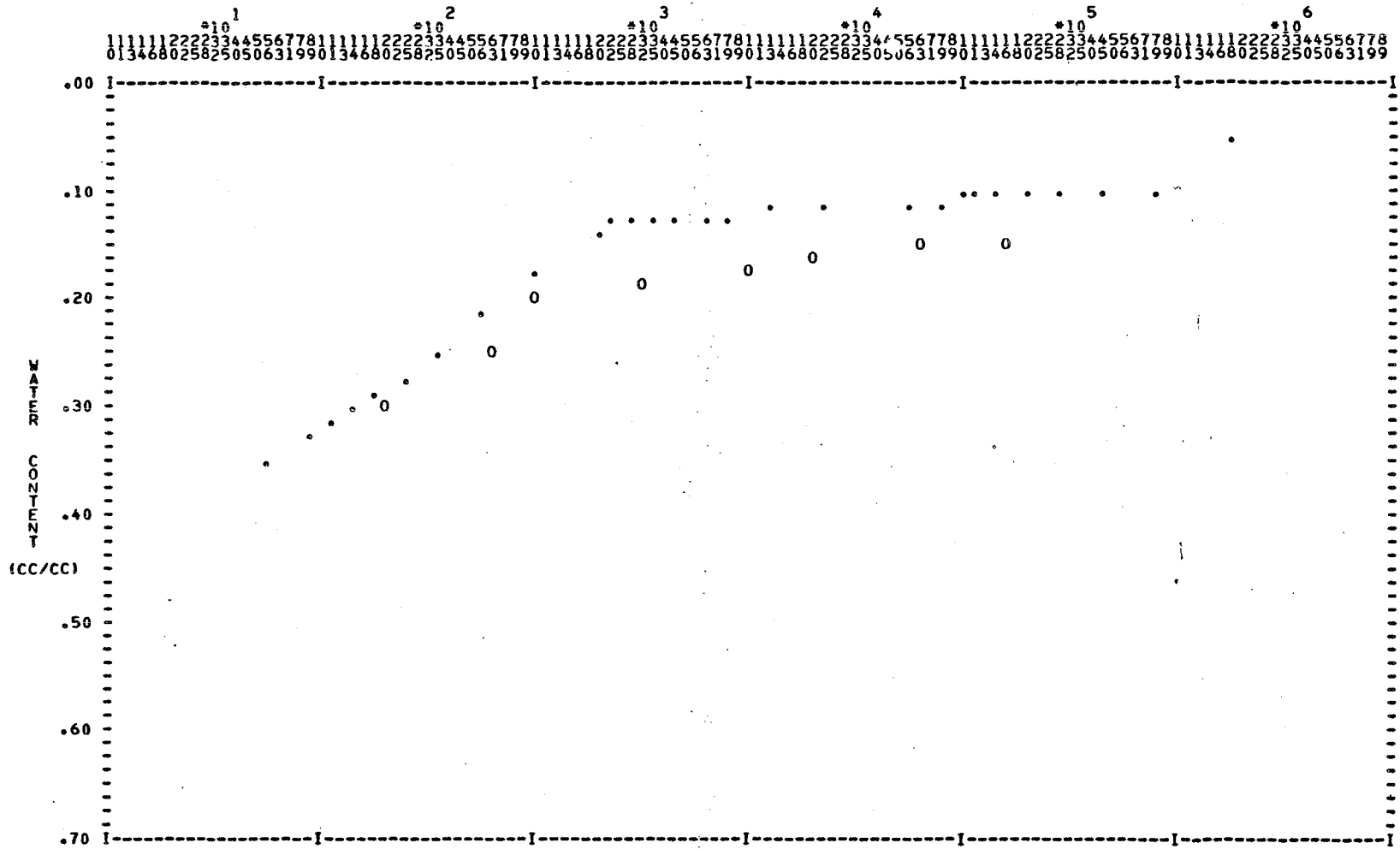
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.049	0.18316E+06
0.098	0.75333E+05
0.100	0.42634E+05
0.102	0.27855E+05
0.103	0.19822E+05
0.104	0.14930E+05
0.105	0.11709E+05
0.106	0.94662E+04
0.106	0.78355E+04
0.110	0.56014E+04
0.115	0.23410E+04
0.118	0.13084E+04
0.121	0.84093E+03
0.123	0.59757E+03
0.125	0.45346E+03
0.127	0.35584E+03
0.128	0.28667E+03
0.130	0.23601E+03
0.143	0.19776E+03
0.173	0.96432E+02
0.175	0.57595E+02
0.176	0.36487E+02
0.177	0.24947E+02
0.178	0.18465E+02
0.179	0.14169E+02
0.180	0.11166E+02
0.181	0.89777E+01
0.345	0.54642E+01

ALPHA = 1.38

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SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 93

O MEASURED ;

• PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.68758E+01

SOIL HORIZON NUMBER 94 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 0.91 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.111	0.150E+05
0.125	0.600E+04
0.139	0.200E+04
0.254	0.100E+04
0.289	0.330E+03
0.323	0.100E+03
0.407	0.600E+02
0.509	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	5.8	0.058
2.00	7.9	0.021
3.00	9.2	0.013
4.00	10.3	0.011
5.00	11.2	0.010
6.00	12.2	0.009
7.00	13.1	0.009
8.00	14.0	0.009
9.00	14.8	0.009
10.00	15.7	0.009
20.00	23.5	0.078
30.00	29.5	0.060
40.00	33.6	0.044
50.00	37.3	0.034
60.00	39.9	0.026
70.00	42.0	0.021
80.00	43.9	0.019
90.00	45.6	0.017
100.00	47.3	0.017
200.00	67.7	0.204
300.00	79.6	0.119
400.00	87.1	0.075
500.00	92.1	0.050
600.00	95.3	0.032
700.00	97.1	0.019
800.00	98.3	0.011
900.00	98.9	0.006
1000.00	99.2	0.003
2000.00	100.0	0.008

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.026	0.11852E+06
0.056	0.48299E+05
0.064	0.27455E+05
0.070	0.18241E+05
0.077	0.13212E+05
0.083	0.10112E+05
0.089	0.80429E+04
0.095	0.65824E+04
0.100	0.55073E+04
0.129	0.40879E+04
0.174	0.17460E+04
0.208	0.96937E+03
0.234	0.62078E+03
0.253	0.43158E+03
0.269	0.31951E+03
0.282	0.24915E+03
0.294	0.20171E+03
0.305	0.16791E+03
0.378	0.13206E+03
0.484	0.53469E+02
0.547	0.28864E+02
0.588	0.18029E+02
0.615	0.12048E+02
0.632	0.84085E+01
0.642	0.60810E+01
0.647	0.44766E+01
0.650	0.32745E+01
0.654	0.19211E+01

ALPHA = 1.38



SOIL HORIZON NUMBER 95 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.42 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.061	0.150E+05
0.077	0.600E+04
0.105	0.200E+04
0.190	0.100E+04
0.217	0.330E+03
0.254	0.100E+03
0.311	0.600E+02
0.376	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	4.6	0.046
2.00	6.1	0.015
3.00	7.2	0.011
4.00	8.2	0.010
5.00	9.1	0.009
6.00	10.0	0.009
7.00	10.8	0.008
8.00	11.6	0.008
9.00	12.4	0.007
10.00	13.1	0.007
20.00	18.9	0.058
30.00	23.9	0.050
40.00	28.3	0.044
50.00	31.9	0.036
60.00	35.0	0.031
70.00	37.7	0.028
80.00	40.4	0.026
90.00	43.0	0.026
100.00	45.5	0.025
200.00	67.9	0.224
300.00	80.3	0.124
400.00	87.9	0.076
500.00	92.7	0.048
600.00	95.7	0.030
700.00	97.5	0.018
800.00	98.5	0.011
900.00	99.1	0.006
1000.00	99.4	0.003
2000.00	100.0	0.006

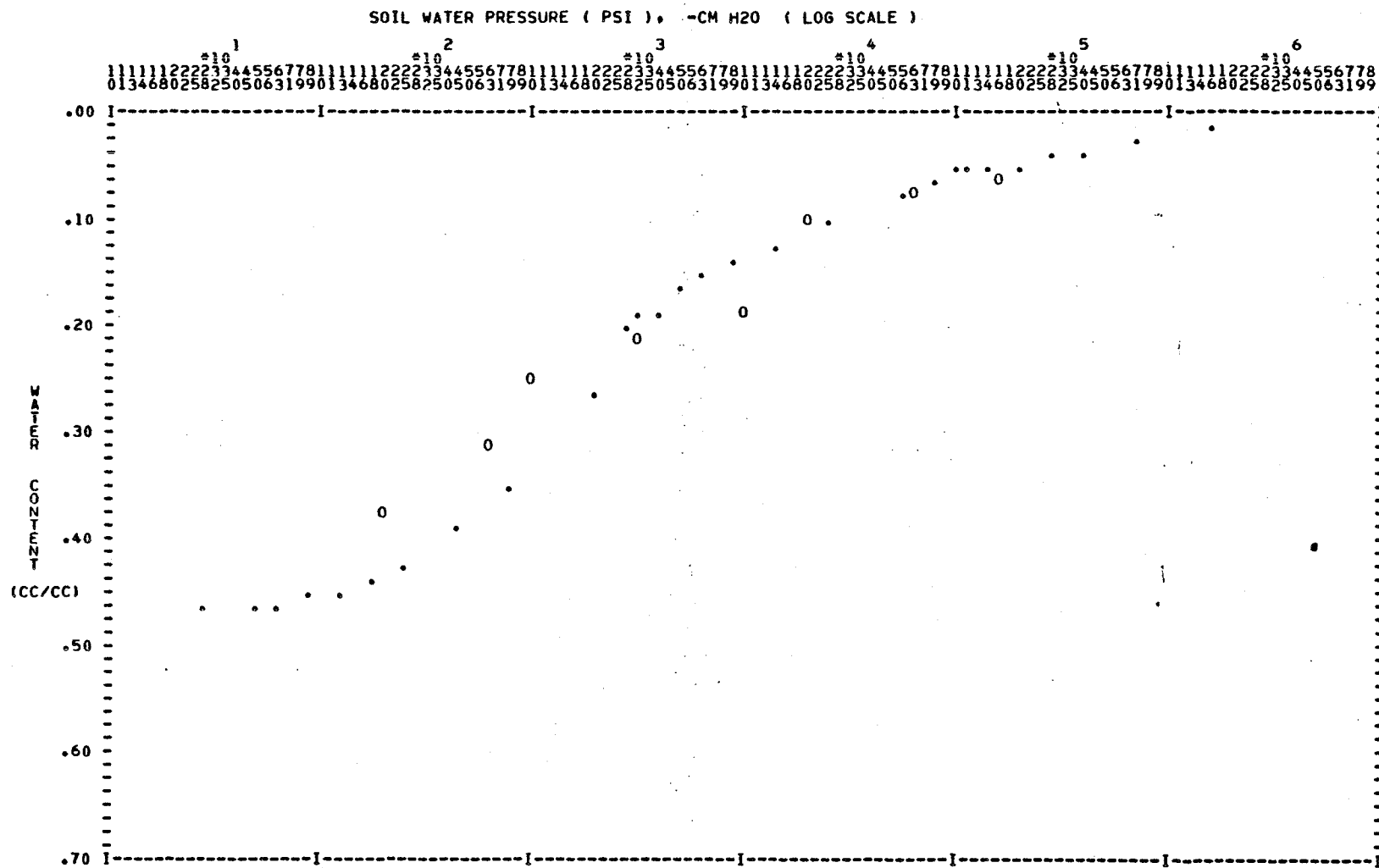
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.014	0.16526E+06
0.031	0.69375E+05
0.036	0.40433E+05
0.040	0.26908E+05
0.044	0.19398E+05
0.048	0.14754E+05
0.052	0.11662E+05
0.056	0.94885E+04
0.059	0.78962E+04
0.074	0.57443E+04
0.099	0.25021E+04
0.121	0.14333E+04
0.140	0.93558E+03
0.155	0.66109E+03
0.169	0.49948E+03
0.181	0.39519E+03
0.193	0.32305E+03
0.205	0.27055E+03
0.263	0.19975E+03
0.344	0.79999E+02
0.390	0.43028E+02
0.419	0.26579E+02
0.437	0.17674E+02
0.448	0.12386E+02
0.455	0.89731E+01
0.459	0.65866E+01
0.461	0.47347E+01
0.463	0.27025E+01

ALPHA = 1.38



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SOIL HORIZON NUMBER 95

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.19879E+01

SOIL HORIZON NUMBER 96 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.55 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.067	0.150E+05
0.081	0.600E+04
0.113	0.200E+04
0.208	0.100E+04
0.234	0.330E+03
0.259	0.100E+03
0.290	0.600E+02
0.377	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	6.3	0.063
2.00	8.0	0.017
3.00	9.2	0.012
4.00	10.3	0.011
5.00	11.3	0.010
6.00	12.2	0.009
7.00	13.1	0.009
8.00	14.0	0.008
9.00	14.7	0.008
10.00	15.5	0.007
20.00	21.5	0.060
30.00	26.5	0.050
40.00	31.0	0.044
50.00	34.7	0.037
60.00	37.9	0.032
70.00	40.8	0.029
80.00	43.6	0.028
90.00	46.2	0.026
100.00	48.8	0.026
200.00	70.4	0.216
300.00	82.3	0.119
400.00	89.5	0.073
500.00	93.9	0.044
600.00	96.4	0.025
700.00	97.9	0.015
800.00	98.7	0.009
900.00	99.2	0.005
1000.00	99.4	0.002
2000.00	100.0	0.006

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.017	0.18577E+06
0.036	0.78015E+05
0.040	0.45419E+05
0.045	0.30177E+05
0.049	0.21722E+05
0.053	0.16500E+05
0.056	0.13027E+05
0.060	0.10588E+05
0.063	0.88036E+04
0.077	0.63838E+04
0.100	0.27685E+04
0.119	0.15938E+04
0.136	0.10393E+04
0.151	0.73703E+03
0.163	0.55725E+03
0.175	0.44007E+03
0.186	0.35867E+03
0.197	0.29939E+03
0.247	0.21915E+03
0.317	0.87733E+02
0.380	0.47103E+02
0.444	0.28808E+02
0.509	0.18910E+02
0.593	0.13155E+02
0.693	0.84493E+01
0.808	0.69454E+01
0.941	0.50398E+01
0.110	0.41100E+01
0.414	0.29857E+01

ALPHA = 1.38

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[illegible]

O MEASURED : . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.18098E+01

SOIL HORIZON NUMBER 97 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.49 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.118	0.150E+05
0.145	0.600E+04
0.174	0.200E+04
0.250	0.100E+04
0.279	0.330E+03
0.301	0.100E+03
0.331	0.600E+02
0.389	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

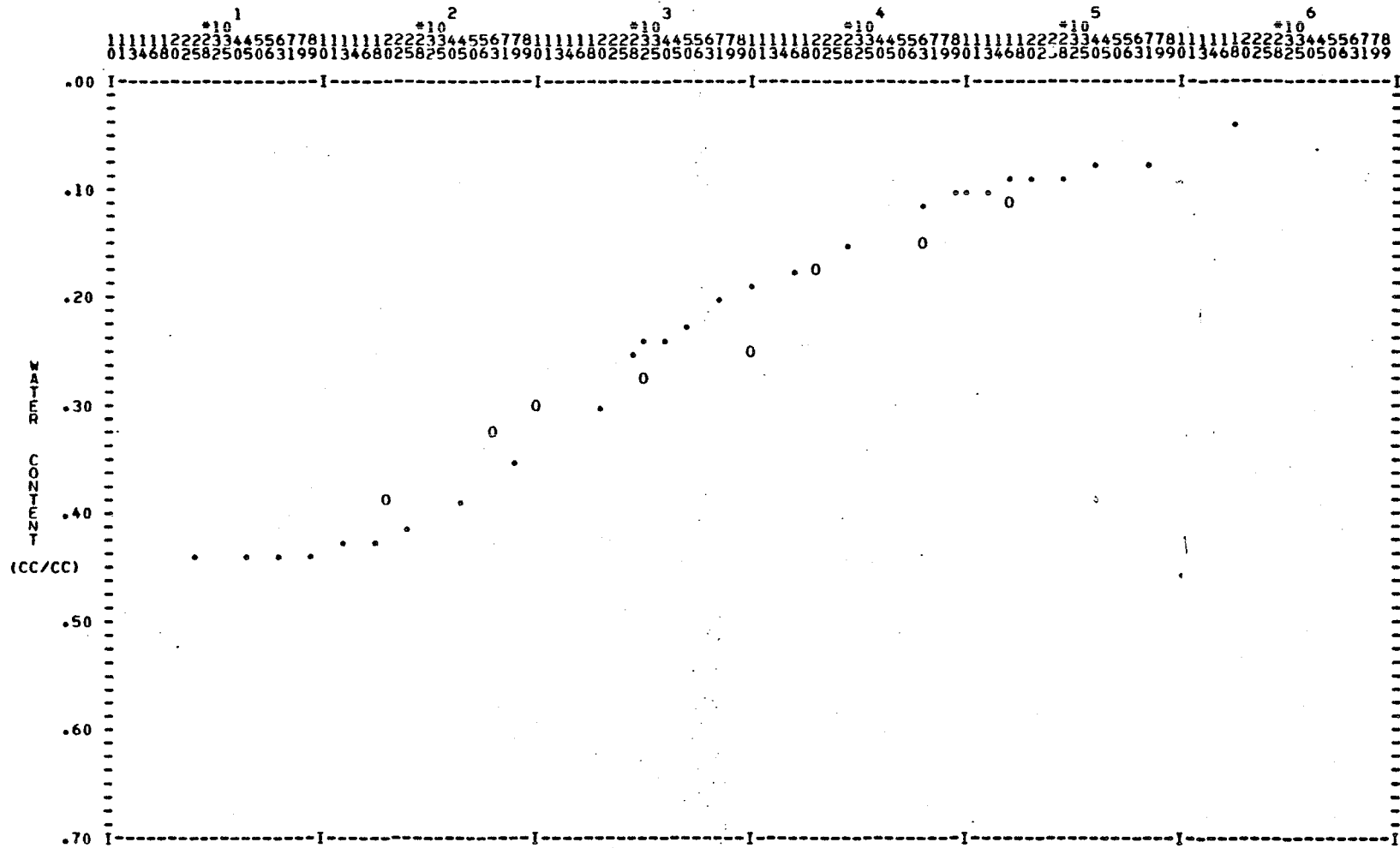
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	15.4	0.154
2.00	16.9	0.015
3.00	17.9	0.010
4.00	18.8	0.009
5.00	19.6	0.009
6.00	20.5	0.008
7.00	21.3	0.008
8.00	22.1	0.008
9.00	22.9	0.008
10.00	23.7	0.008
20.00	30.6	0.069
30.00	36.5	0.059
40.00	41.4	0.049
50.00	45.4	0.040
60.00	48.7	0.033
70.00	51.6	0.029
80.00	54.2	0.026
90.00	56.5	0.024
100.00	58.7	0.022
200.00	76.0	0.173
300.00	85.6	0.096
400.00	91.4	0.058
500.00	95.0	0.036
600.00	97.1	0.021
700.00	98.4	0.013
800.00	99.2	0.007
900.00	99.5	0.004
1000.00	99.7	0.002
2000.00	100.0	0.003

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.037	0.17483E+06
0.076	0.72111E+05
0.080	0.41662E+05
0.084	0.27875E+05
0.088	0.20250E+05
0.091	0.15518E+05
0.095	0.12349E+05
0.098	0.10107E+05
0.102	0.84550E+04
0.119	0.62664E+04
0.147	0.27257E+04
0.171	0.15499E+04
0.190	0.10053E+04
0.206	0.70820E+03
0.220	0.52996E+03
0.231	0.41451E+03
0.242	0.33495E+03
0.252	0.27751E+03
0.265	0.20062E+03
0.354	0.80455E+02
0.388	0.43105E+02
0.408	0.26479E+02
0.421	0.17525E+02
0.428	0.12229E+02
0.432	0.88132E+01
0.435	0.64167E+01
0.436	0.45221E+01
0.437	0.24989E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 97

0 MEASURED ;      . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.23978E+01

SOIL HORIZON NUMBER 98 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.66 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.103	0.150E+05
0.124	0.600E+04
0.148	0.200E+04
0.227	0.100E+04
0.249	0.330E+03
0.269	0.100E+03
0.312	0.600E+02
0.344	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

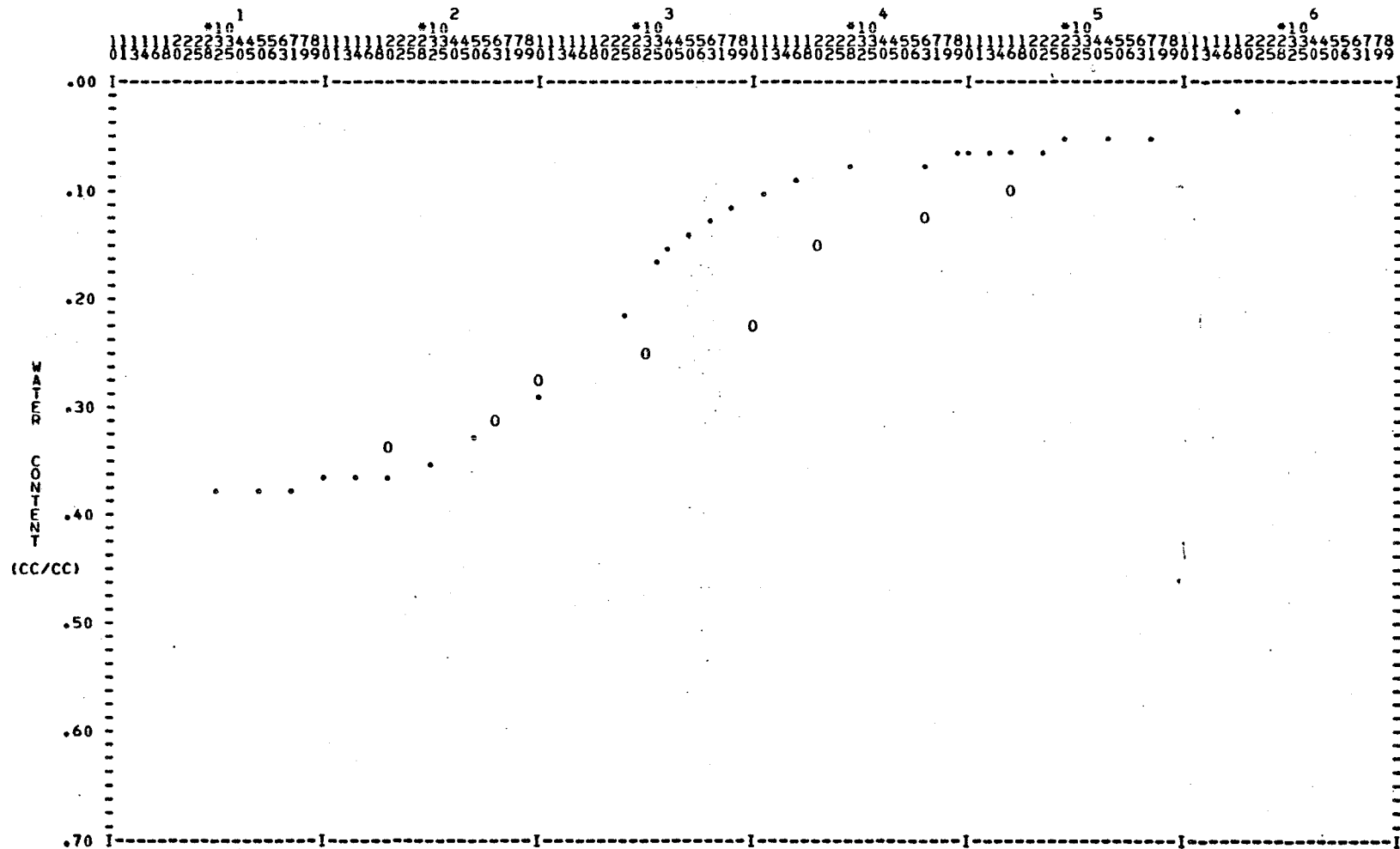
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	12.5	0.125
2.00	13.1	0.006
3.00	13.7	0.006
4.00	14.3	0.006
5.00	14.8	0.006
6.00	15.4	0.005
7.00	15.9	0.005
8.00	16.3	0.004
9.00	16.7	0.004
10.00	17.1	0.004
20.00	19.9	0.028
30.00	22.8	0.029
40.00	26.0	0.032
50.00	28.9	0.029
60.00	31.8	0.029
70.00	34.9	0.031
80.00	38.0	0.031
90.00	41.0	0.031
100.00	44.0	0.030
200.00	69.4	0.254
300.00	82.8	0.134
400.00	90.6	0.078
500.00	94.8	0.042
600.00	97.0	0.022
700.00	98.3	0.013
800.00	99.0	0.008
900.00	99.4	0.004
1000.00	99.6	0.002
2000.00	100.0	0.004

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.024	0.16882E+06
0.050	0.73878E+05
0.052	0.44221E+05
0.054	0.29513E+05
0.056	0.21217E+05
0.058	0.16065E+05
0.060	0.12633E+05
0.062	0.10225E+05
0.063	0.84665E+04
0.069	0.60235E+04
0.080	0.27197E+04
0.091	0.16328E+04
0.103	0.10816E+04
0.113	0.78875E+03
0.125	0.61333E+03
0.136	0.49071E+03
0.148	0.40213E+03
0.159	0.33612E+03
0.212	0.24661E+03
0.284	0.97911E+02
0.324	0.52005E+02
0.346	0.31175E+02
0.358	0.20064E+02
0.365	0.14021E+02
0.368	0.10123E+02
0.371	0.73935E+01
0.372	0.52541E+01
0.373	0.30155E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 98

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.41786E+01

SOIL HORIZON NUMBER 99 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.56 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.053	0.150E+05
0.061	0.600E+04
0.075	0.200E+04
0.120	0.100E+04
0.154	0.330E+03
0.183	0.100E+03
0.307	0.600E+02
0.365	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	7.2	0.072
1.00	7.4	0.000
3.00	7.4	0.000
4.00	7.8	0.000
5.00	8.1	0.000
6.00	8.2	0.000
7.00	8.7	0.000
8.00	8.8	0.000
9.00	9.0	0.000
10.00	9.0	0.000
20.00	10.0	0.010
30.00	10.5	0.015
40.00	10.6	0.020
50.00	10.5	0.010
60.00	11.0	0.024
70.00	11.0	0.031
80.00	11.5	0.034
90.00	11.5	0.035
100.00	12.3	0.308
200.00	62.3	0.160
300.00	78.5	0.095
400.00	82.1	0.052
500.00	93.3	0.028
600.00	96.1	0.017
700.00	97.8	0.010
800.00	98.7	0.005
900.00	99.3	0.002
1000.00	99.5	0.005
2000.00	100.0	0.005

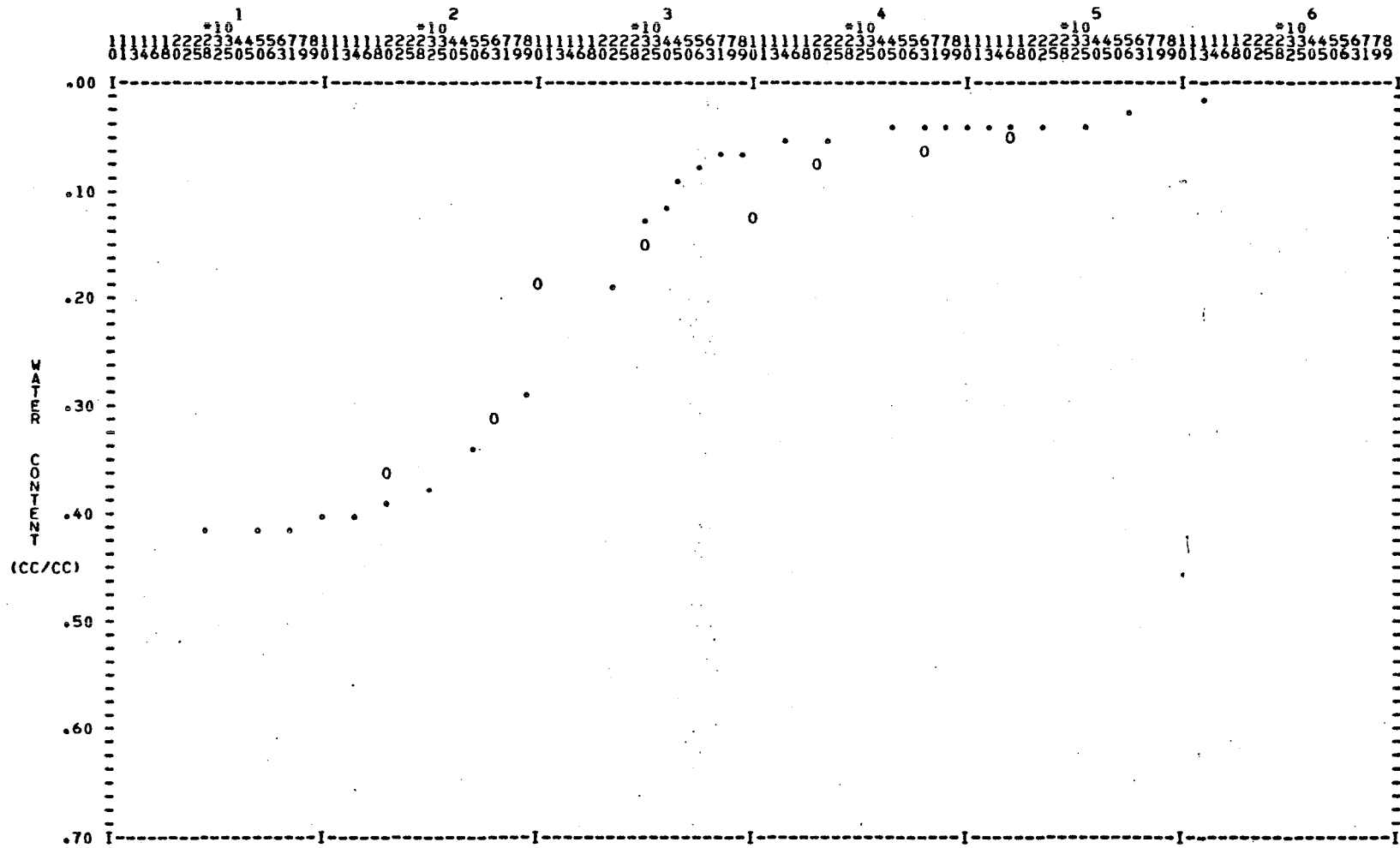
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.015	0.12041E+06
0.031	0.35848E+05
0.033	0.34351E+05
0.033	0.23035E+05
0.034	0.16561E+05
0.035	0.12519E+05
0.035	0.98220E+04
0.036	0.79289E+04
0.037	0.65462E+04
0.039	0.45880E+04
0.044	0.22258E+04
0.052	0.13839E+04
0.060	0.92524E+03
0.069	0.70337E+03
0.080	0.56823E+03
0.094	0.46202E+03
0.108	0.38177E+03
0.122	0.32057E+03
0.193	0.23631E+03
0.290	0.93750E+02
0.343	0.50001E+02
0.373	0.30083E+02
0.389	0.19451E+02
0.399	0.13601E+02
0.404	0.98252E+01
0.407	0.71773E+01
0.409	0.50961E+01
0.410	0.29066E+01

ALPHA = 1.38



SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 99

0 MEASURED ;      • PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.36817E+01

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SOIL HORIZON NUMBER 100 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.59 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.083	0.150E+05
0.100	0.600E+04
0.118	0.200E+04
0.207	0.100E+04
0.229	0.330E+03
0.270	0.100E+03
0.328	0.600E+02
0.382	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	11.7	0.117
2.00	22.0	0.003
3.00	22.3	0.003
4.00	22.7	0.004
5.00	33.1	0.004
6.00	33.5	0.004
7.00	33.8	0.003
8.00	44.1	0.003
9.00	44.4	0.003
10.00	44.7	0.003
20.00	46.6	0.019
30.00	49.0	0.024
40.00	52.2	0.033
50.00	55.7	0.035
60.00	59.4	0.037
70.00	63.3	0.039
80.00	67.0	0.038
90.00	70.6	0.036
100.00	73.9	0.033
200.00	88.9	0.150
300.00	92.1	0.033
400.00	94.8	0.027
500.00	96.1	0.013
600.00	96.5	0.004
700.00	98.0	0.015
800.00	98.9	0.009
900.00	99.4	0.005
1000.00	99.6	0.002
2000.00	100.0	0.004

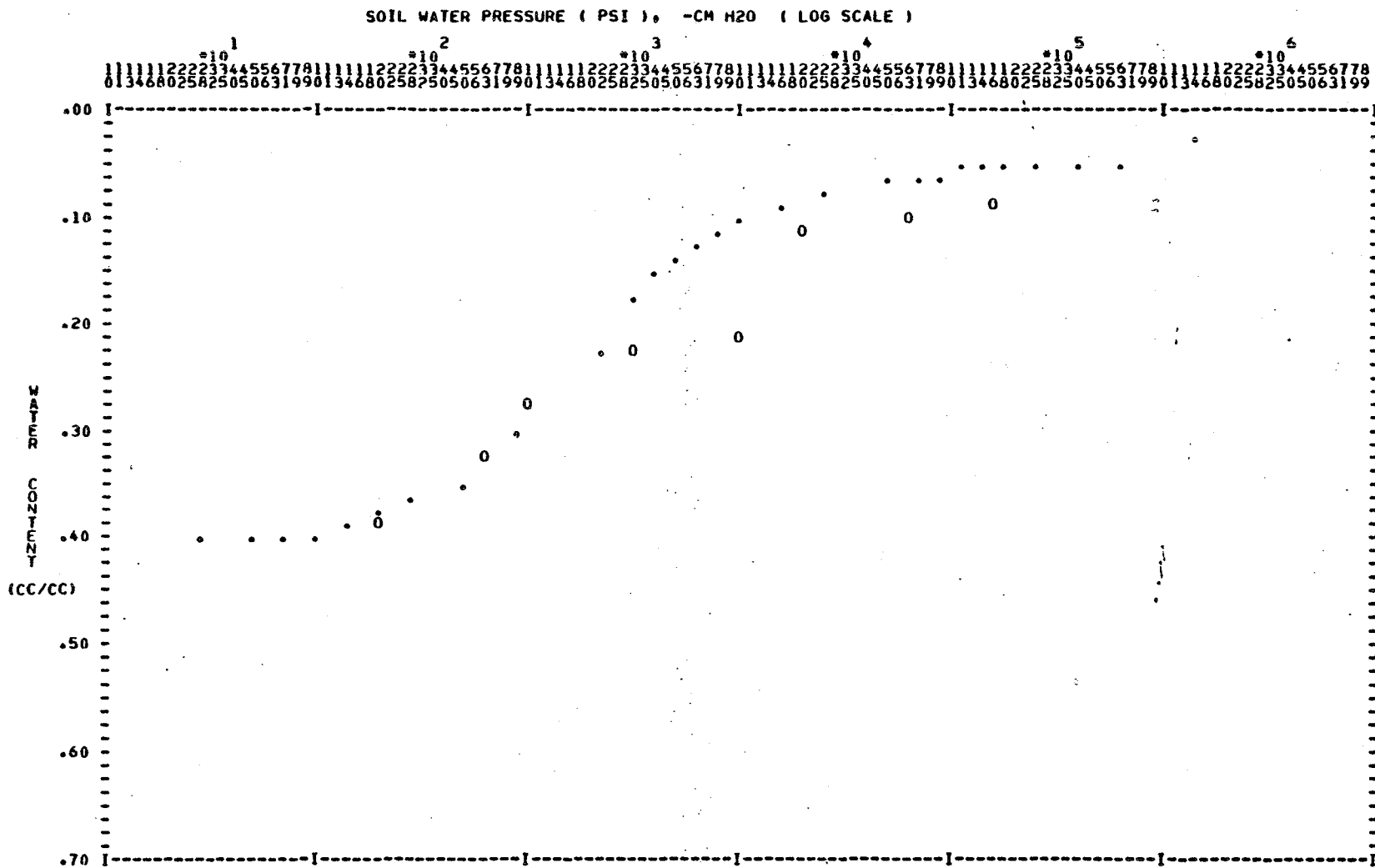
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.024	0.13870E+06
0.049	0.63252E+05
0.050	0.38715E+05
0.052	0.25988E+05
0.053	0.18721E+05
0.055	0.14184E+05
0.056	0.11134E+05
0.057	0.90252E+04
0.058	0.74685E+04
0.063	0.52927E+04
0.071	0.24781E+04
0.082	0.15500E+04
0.096	0.10575E+04
0.110	0.78175E+03
0.125	0.60578E+03
0.141	0.48149E+03
0.155	0.39151E+03
0.169	0.32453E+03
0.226	0.23242E+03
0.302	0.92442E+02
0.344	0.49085E+02
0.365	0.29655E+02
0.389	0.13623E+02
0.399	0.93704E+01
0.397	0.72203E+01
0.398	0.51064E+01
0.399	0.23521E+01

ALPHA = 1.38

B-200

B-201



SOIL HORIZON NUMBER 101 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 0.78 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.043	0.150E+05
0.087	0.600E+04
0.119	0.200E+04
0.324	0.100E+04
0.375	0.330E+03
0.419	0.100E+03
0.452	0.600E+02
0.575	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

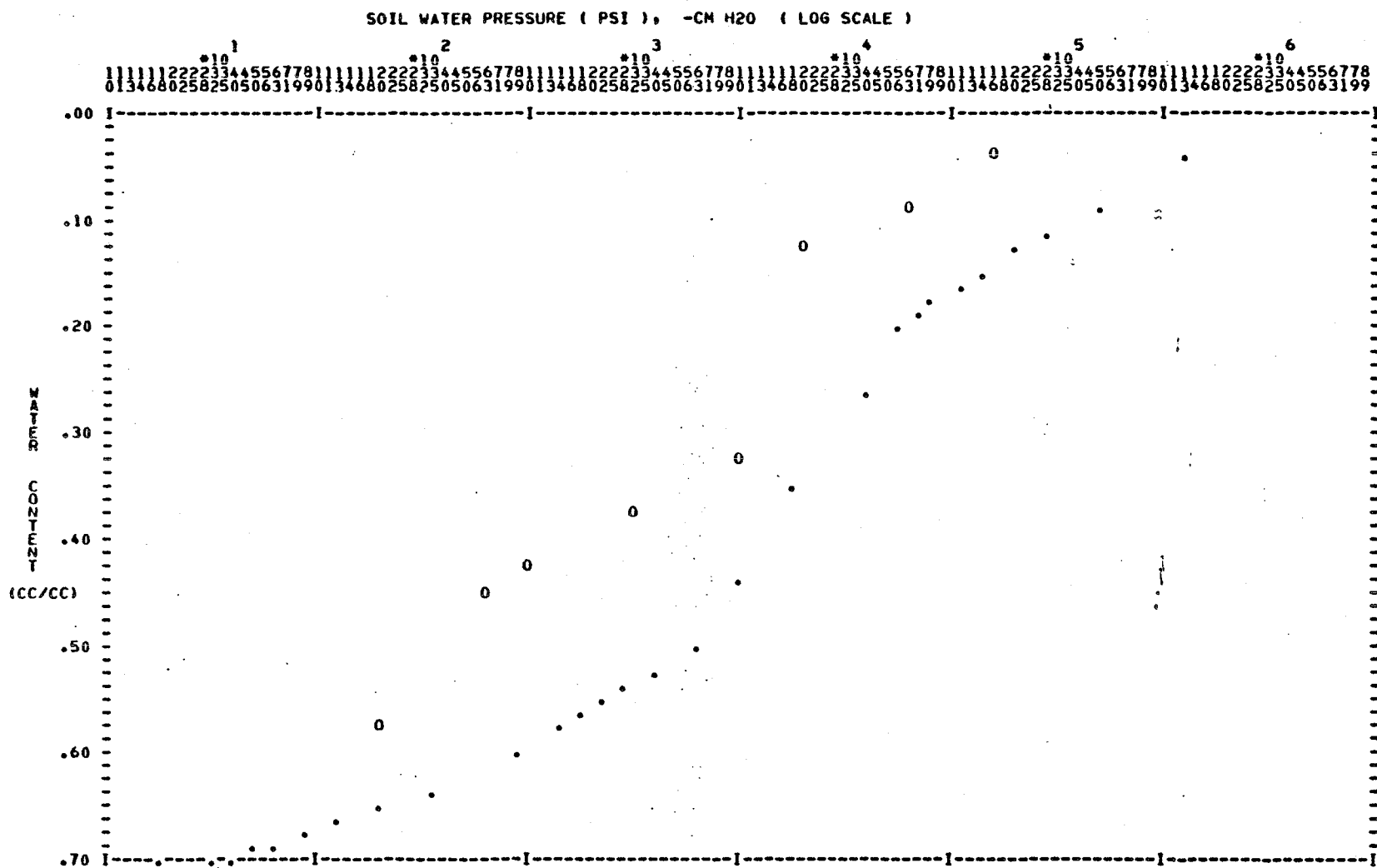
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	6.5	0.065
2.00	10.7	0.042
5.00	13.7	0.030
10.00	16.2	0.029
20.00	19.2	0.026
40.00	21.6	0.024
60.00	23.9	0.022
80.00	25.9	0.020
100.00	27.8	0.019
200.00	29.6	0.018
400.00	33.1	0.035
600.00	36.6	0.035
800.00	37.5	0.008
1000.00	37.1	0.056
2000.00	35.9	0.028
4000.00	38.0	0.021
6000.00	39.6	0.016
8000.00	40.9	0.013
10000.00	41.9	0.010
20000.00	44.1	0.062
40000.00	41.3	0.033
60000.00	41.3	0.022
80000.00	41.3	0.017
100000.00	41.3	0.013
200000.00	41.3	0.010
400000.00	41.3	0.008
600000.00	41.3	0.005
800000.00	41.3	0.004
1000000.00	41.3	0.004
2000000.00	41.3	0.008

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.036	0.12055E+06
0.086	0.50879E+05
0.107	0.29660E+05
0.127	0.19653E+05
0.144	0.14100E+05
0.161	0.10675E+05
0.176	0.84021E+04
0.189	0.68098E+04
0.202	0.56471E+04
0.256	0.40524E+04
0.352	0.18180E+04
0.438	0.10264E+04
0.496	0.61180E+03
0.526	0.39063E+03
0.543	0.28476E+03
0.556	0.21644E+03
0.566	0.16979E+03
0.574	0.13636E+03
0.600	0.93928E+02
0.633	0.37389E+02
0.652	0.20437E+02
0.666	0.13038E+02
0.676	0.90954E+01
0.685	0.66706E+01
0.691	0.50475E+01
0.695	0.38972E+01
0.699	0.30370E+01
0.703	0.17157E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 102 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.20 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.073	0.150E+05
0.094	0.600E+04
0.158	0.200E+04
0.259	0.100E+04
0.283	0.330E+03
0.344	0.100E+03
0.350	0.600E+02
0.442	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

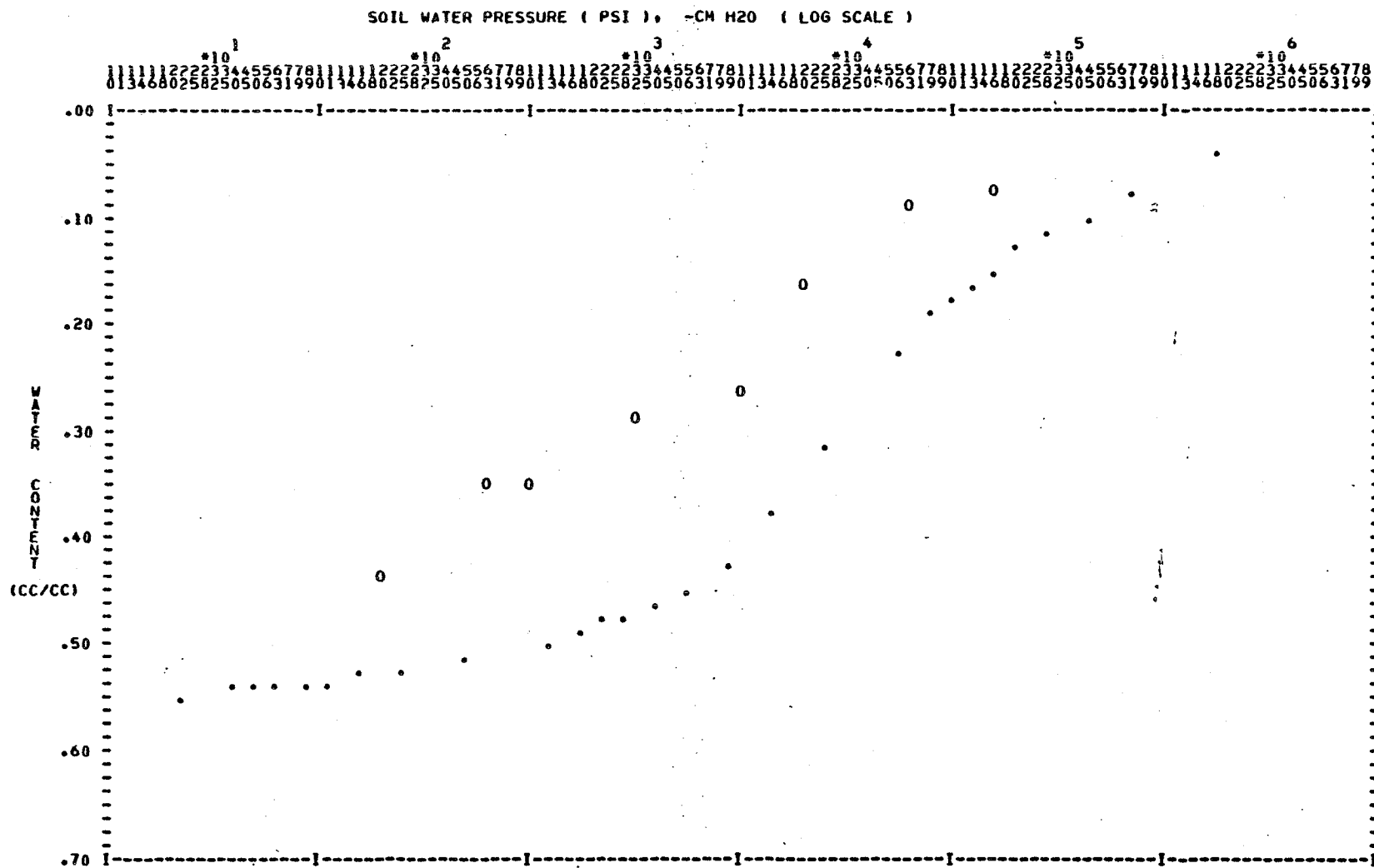
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	6.5	0.065
2.00	11.8	0.053
3.00	15.6	0.038
4.00	19.0	0.033
5.00	22.2	0.031
6.00	25.0	0.028
7.00	27.5	0.026
8.00	29.9	0.024
9.00	32.1	0.022
10.00	34.1	0.020
20.00	49.2	0.151
30.00	63.8	0.146
40.00	75.2	0.111
50.00	81.1	0.059
60.00	83.8	0.027
70.00	85.7	0.019
80.00	87.0	0.013
90.00	87.9	0.009
100.00	88.6	0.007
200.00	92.4	0.038
300.00	94.4	0.020
400.00	95.7	0.013
500.00	96.7	0.010
600.00	97.5	0.008
700.00	98.2	0.007
800.00	98.7	0.005
900.00	99.1	0.004
1000.00	99.4	0.003
2000.00	100.0	0.006

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.032	0.17721E+06
0.033	0.74597E+06
0.034	0.43316E+06
0.035	0.28621E+06
0.036	0.20488E+06
0.037	0.15483E+06
0.038	0.12167E+06
0.039	0.98477E+05
0.040	0.81562E+05
0.041	0.68262E+05
0.042	0.58966E+05
0.043	0.52299E+05
0.044	0.46781E+05
0.045	0.42667E+05
0.046	0.39226E+05
0.047	0.36332E+05
0.048	0.33984E+05
0.049	0.31751E+05
0.050	0.29700E+05
0.051	0.27734E+05
0.052	0.26160E+05
0.053	0.16130E+05
0.054	0.11722E+05
0.055	0.86647E+04
0.056	0.66167E+04
0.057	0.51712E+04
0.058	0.41041E+04
0.059	0.22881E+04

ALPHA = 1.38

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SOIL HORIZON NUMBER 102

SUM OF (ABS(LOG(P<sub>SIH</sub>)-LOG(P<sub>SIP</sub>))) = 0.82981E+01

SOIL HORIZON NUMBER 103 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.38 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT SOIL WATER PRESSURE  
(CC/CC) (-CM H2O)

0.127	0.150E+05
0.152	0.600E+04
0.213	0.200E+04
0.297	0.100E+04
0.316	0.330E+03
0.342	0.100E+03
0.352	0.600E+02
0.406	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. PERCENT PARTICLES INTERVAL FRACTION  
( MICROMETERS ) LESS THAN DIAM. ( G/G )

1.00	16.2	0.162
2.00	21.3	0.091
3.00	24.9	0.036
4.00	28.1	0.033
5.00	31.1	0.026
6.00	33.7	0.026
7.00	36.1	0.022
8.00	38.2	0.022
9.00	40.2	0.020
10.00	42.1	0.019
20.00	55.9	0.138
30.00	68.7	0.128
40.00	78.7	0.100
50.00	84.1	0.054
60.00	86.8	0.027
70.00	88.6	0.018
80.00	89.9	0.013
90.00	90.7	0.009
100.00	91.3	0.006
200.00	94.4	0.031
300.00	95.8	0.015
400.00	96.9	0.010
500.00	97.6	0.007
600.00	98.2	0.006
700.00	98.7	0.005
800.00	99.0	0.004
900.00	99.3	0.003
1000.00	99.5	0.002
2000.00	100.0	0.005

PREDICTED MOISTURE CHARACTERISTIC DATA

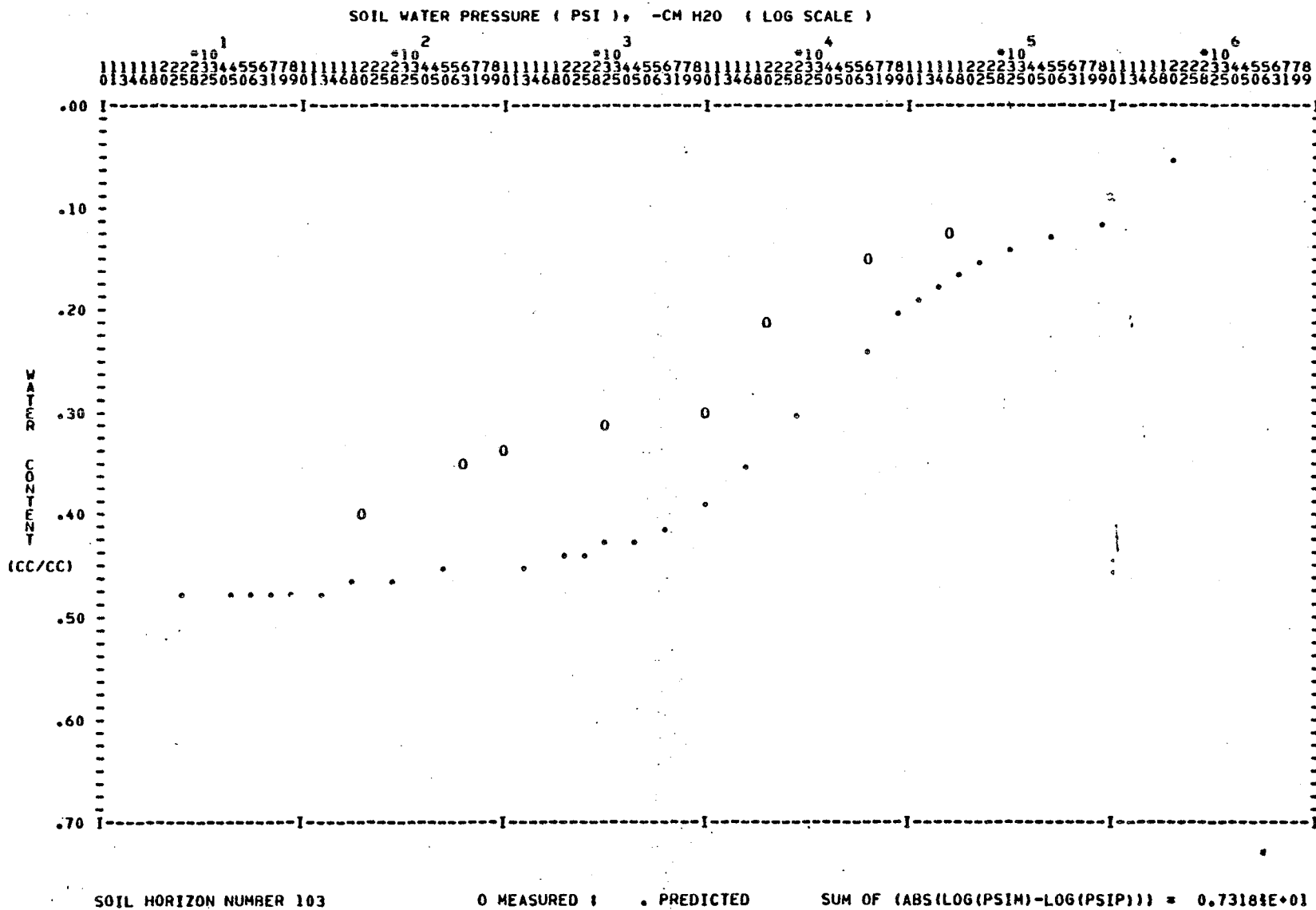
SOIL WATER CONTENT SOIL WATER PRESSURE  
( CC/CC ) ( -CM H2O )

0.051	0.20185E+06
0.111	0.84714E+06
0.142	0.49033E+06
0.162	0.32351E+06
0.182	0.23138E+06
0.202	0.17476E+06
0.222	0.13728E+06
0.242	0.11107E+06
0.262	0.91972E+05
0.282	0.65056E+05
0.302	0.29022E+05
0.322	0.16342E+05
0.342	0.97800E+04
0.362	0.62494E+04
0.382	0.44762E+04
0.402	0.33330E+04
0.422	0.25469E+04
0.442	0.19760E+04
0.462	0.15268E+04
0.482	0.51966E+03
0.502	0.28412E+03
0.522	0.18100E+03
0.542	0.12614E+03
0.562	0.92907E+02
0.582	0.70787E+02
0.602	0.55243E+02
0.622	0.43807E+02
0.642	0.25326E+02

ALPHA = 1.38



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SOIL HORIZON NUMBER 104 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.61 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.138	0.150E+05
0.158	0.600E+04
0.209	0.200E+04
0.296	0.100E+04
0.316	0.330E+03
0.335	0.100E+03
0.348	0.600E+02
0.372	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

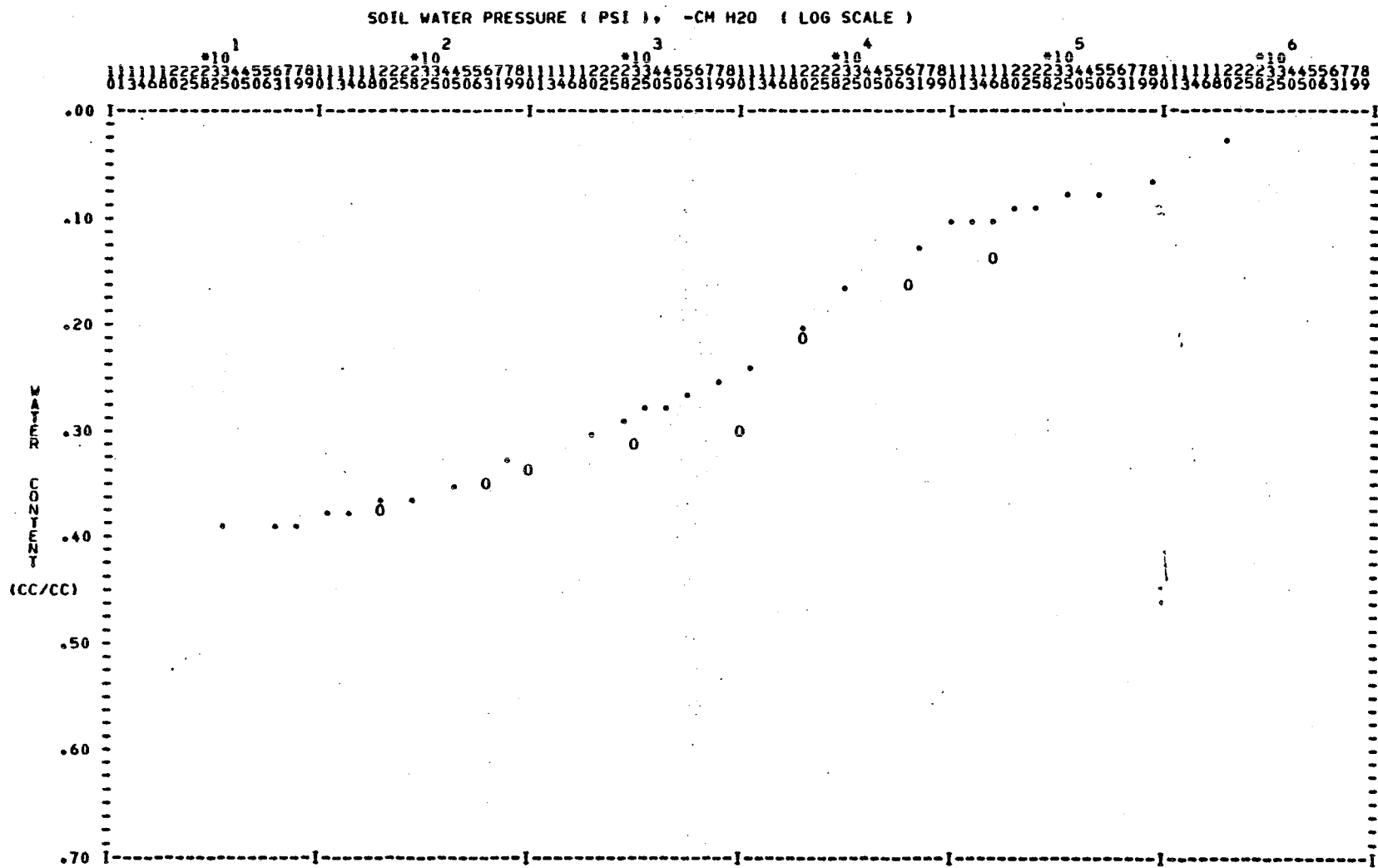
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	12.6	0.126
2.00	15.1	0.025
3.00	16.9	0.018
4.00	18.6	0.017
5.00	20.3	0.016
6.00	21.8	0.015
7.00	23.3	0.015
8.00	24.6	0.014
9.00	26.0	0.013
10.00	27.2	0.013
20.00	37.6	0.104
30.00	48.1	0.105
40.00	56.6	0.085
50.00	61.7	0.051
60.00	64.9	0.032
70.00	67.4	0.026
80.00	69.6	0.021
90.00	71.3	0.018
100.00	72.8	0.015
200.00	82.0	0.092
300.00	86.8	0.048
400.00	90.0	0.032
500.00	92.4	0.024
600.00	94.4	0.020
700.00	96.0	0.016
800.00	97.2	0.012
900.00	98.1	0.009
1000.00	98.8	0.007
2000.00	100.0	0.012

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.030	0.21097E+06
0.063	0.88744E+05
0.070	0.51868E+05
0.076	0.34574E+05
0.083	0.24960E+05
0.088	0.19003E+05
0.094	0.15032E+05
0.099	0.12238E+05
0.104	0.10190E+05
0.127	0.74254E+04
0.168	0.33346E+04
0.205	0.18914E+04
0.232	0.11564E+04
0.248	0.77065E+03
0.260	0.57008E+03
0.269	0.43884E+03
0.276	0.34803E+03
0.283	0.28245E+03
0.304	0.19519E+03
0.331	0.77526E+02
0.347	0.42217E+02
0.358	0.26915E+02
0.366	0.18952E+02
0.373	0.14012E+02
0.379	0.10673E+02
0.383	0.82970E+01
0.386	0.65220E+01
0.390	0.35700E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 104

0 MEASURED

0 PREDICTED

SUM OF (ABS(LOG(P<sub>SIM</sub>)-LOG(P<sub>SIP</sub>))) = 0.21422E+01

SOIL HORIZON NUMBER 105 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.86 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.080	0.150E+05
0.097	0.600E+04
0.126	0.200E+04
0.171	0.100E+04
0.186	0.330E+03
0.203	0.100E+03
0.212	0.600E+02
0.247	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	3.4	0.134
2.00	4.8	0.014
3.00	5.8	0.010
4.00	6.7	0.009
5.00	7.6	0.009
6.00	8.5	0.008
7.00	9.3	0.008
8.00	10.0	0.008
9.00	10.8	0.007
10.00	11.5	0.007
20.00	22.4	0.059
30.00	33.4	0.060
40.00	38.3	0.050
50.00	41.5	0.032
60.00	43.4	0.019
70.00	44.7	0.013
80.00	45.8	0.011
90.00	46.9	0.011
100.00	48.1	0.012
200.00	58.2	0.101
300.00	66.5	0.082
400.00	73.3	0.068
500.00	78.4	0.051
600.00	82.2	0.038
700.00	85.4	0.031
800.00	88.0	0.026
900.00	90.2	0.022
1000.00	92.1	0.019
2000.00	100.0	0.079

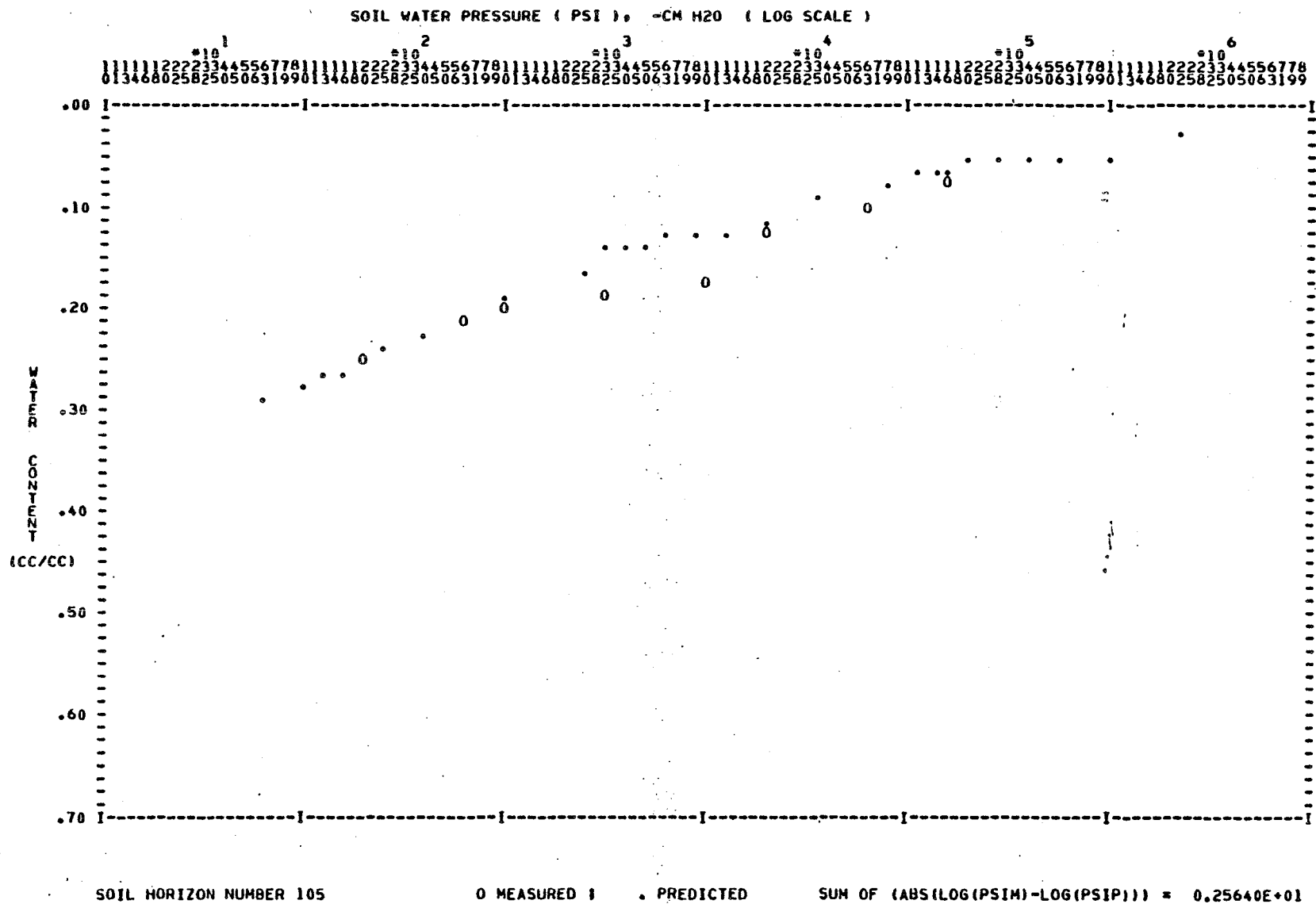
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.022	0.23144E+06
0.046	0.071353E+05
0.048	0.36978E+05
0.051	0.38044E+05
0.054	0.27498E+05
0.056	0.20458E+05
0.059	0.16594E+05
0.061	0.13520E+05
0.063	0.11265E+05
0.073	0.52286E+04
0.091	0.32694E+04
0.107	0.21046E+04
0.119	0.13033E+04
0.126	0.11398E+04
0.131	0.85598E+03
0.133	0.61823E+03
0.135	0.48005E+03
0.138	0.33936E+03
0.142	0.23341E+03
0.159	0.24536E+03
0.186	0.10588E+03
0.208	0.60170E+02
0.226	0.38335E+02
0.239	0.26529E+02
0.250	0.19621E+02
0.258	0.15145E+02
0.266	0.12207E+02
0.272	0.98625E+01
0.286	0.62982E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 106 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.44 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.042	0.150E+05
0.052	0.600E+04
0.089	0.200E+04
0.128	0.100E+04
0.166	0.330E+03
0.204	0.100E+03
0.226	0.600E+02
0.344	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	3.0	0.030
2.00	4.8	0.018
3.00	5.9	0.011
4.00	6.9	0.010
5.00	7.8	0.009
6.00	8.6	0.008
7.00	9.4	0.008
8.00	10.2	0.008
9.00	11.0	0.008
10.00	11.7	0.007
20.00	18.2	0.065
30.00	23.2	0.050
40.00	26.9	0.038
50.00	29.9	0.030
60.00	32.3	0.024
70.00	34.4	0.021
80.00	36.2	0.018
90.00	37.9	0.017
100.00	39.5	0.016
200.00	53.8	0.143
300.00	64.3	0.104
400.00	71.3	0.076
500.00	77.7	0.059
600.00	82.6	0.049
700.00	86.8	0.042
800.00	90.4	0.036
900.00	93.5	0.031
1000.00	96.2	0.027
2000.00	100.0	0.038

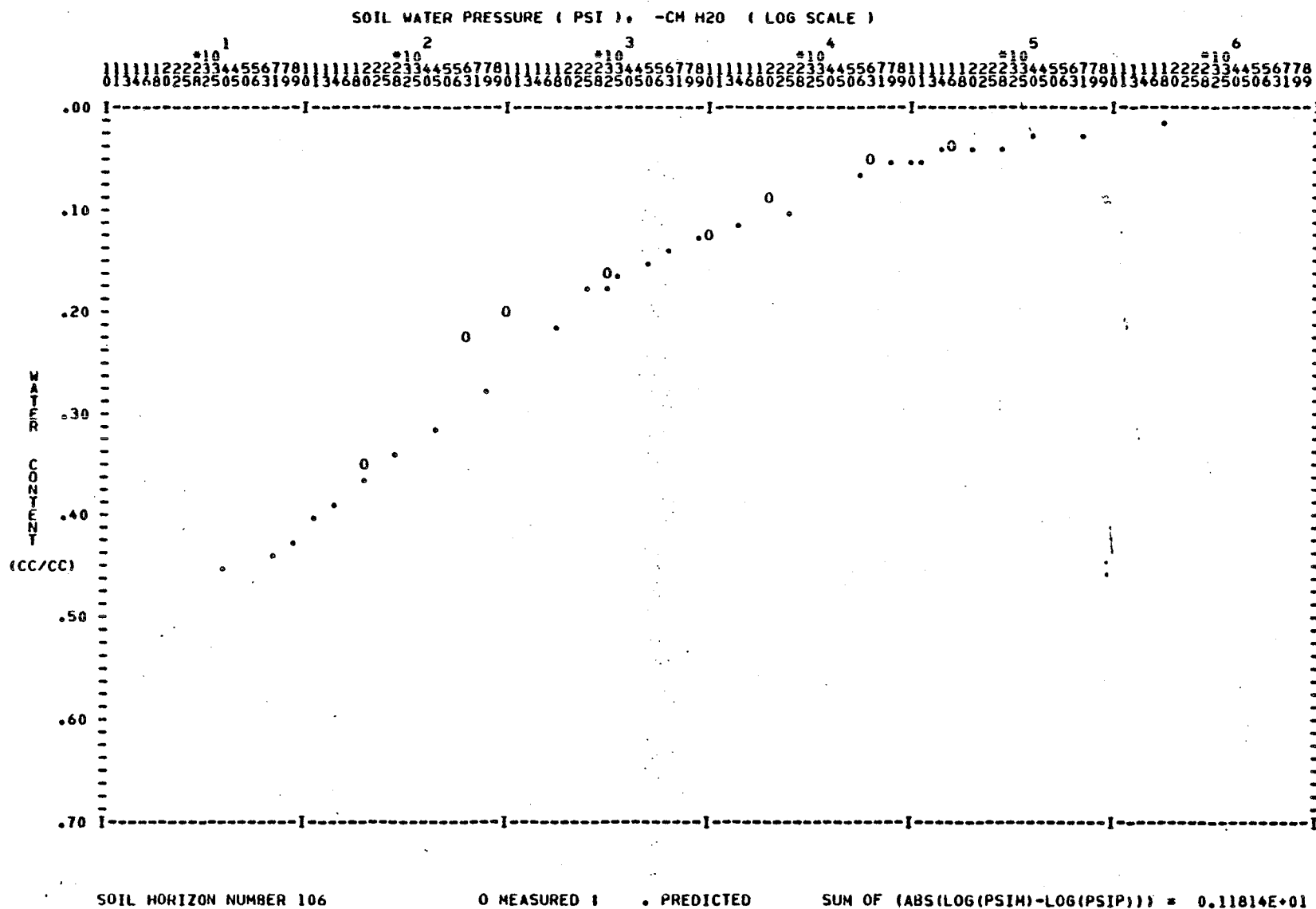
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.011	0.17409E+06
0.022	0.71349E+05
0.029	0.40717E+05
0.034	0.27014E+05
0.038	0.19517E+05
0.041	0.14899E+05
0.045	0.11824E+05
0.048	0.96573E+04
0.052	0.80661E+04
0.068	0.59524E+04
0.094	0.25400E+04
0.114	0.14187E+04
0.130	0.91398E+03
0.142	0.64162E+03
0.152	0.47920E+03
0.161	0.37464E+03
0.169	0.30287E+03
0.177	0.25118E+03
0.213	0.18629E+03
0.270	0.78652E+02
0.311	0.43653E+02
0.341	0.28028E+02
0.366	0.19747E+02
0.387	0.14757E+02
0.404	0.11455E+02
0.420	0.91524E+01
0.433	0.74798E+01
0.448	0.38965E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 107 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.21 G/CM\*\*3  
 PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.034	0.150E+05
0.042	0.600E+04
0.071	0.200E+04
0.201	0.100E+04
0.237	0.330E+03
0.269	0.100E+03
0.288	0.600E+02
0.390	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	1.9	0.019
2.00	3.5	0.016
3.00	4.6	0.011
4.00	5.5	0.009
5.00	6.3	0.009
6.00	7.1	0.008
7.00	7.9	0.008
8.00	8.7	0.008
9.00	9.4	0.007
10.00	10.1	0.007
20.00	16.4	0.063
30.00	21.6	0.052
40.00	25.6	0.040
50.00	28.5	0.029
60.00	30.6	0.021
70.00	32.2	0.016
80.00	33.6	0.014
90.00	34.9	0.014
100.00	36.3	0.014
200.00	50.9	0.146
300.00	62.2	0.113
400.00	70.5	0.083
500.00	76.9	0.064
600.00	82.2	0.053
700.00	86.6	0.044
800.00	90.4	0.038
900.00	93.6	0.032
1000.00	96.3	0.027
2000.00	100.0	0.037

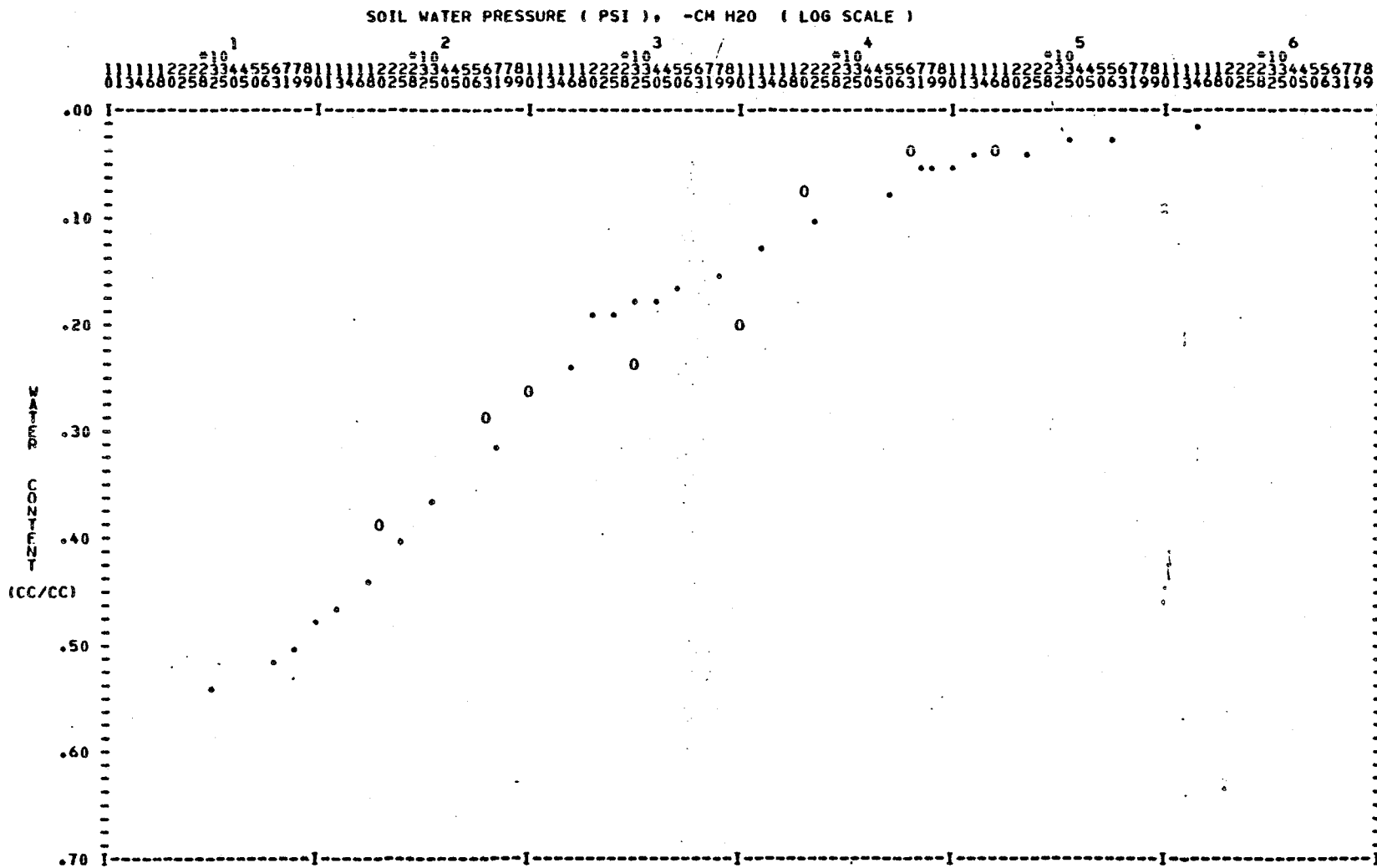
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.010	0.14327E+06
0.016	0.59014E+06
0.027	0.33891E+06
0.032	0.22544E+06
0.037	0.16304E+06
0.041	0.12451E+06
0.045	0.98819E+04
0.049	0.80709E+04
0.053	0.67401E+04
0.072	0.49693E+04
0.103	0.21500E+04
0.128	0.12060E+04
0.147	0.76647E+03
0.160	0.52370E+03
0.170	0.38315E+03
0.179	0.29894E+03
0.186	0.24404E+03
0.194	0.20550E+03
0.237	0.15704E+03
0.307	0.67136E+02
0.361	0.37301E+02
0.400	0.23941E+02
0.432	0.16824E+02
0.458	0.12535E+02
0.481	0.97037E+01
0.500	0.77322E+01
0.516	0.63016E+01
0.533	0.32576E+01

ALPHA = 1.38



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SOIL HORIZON NUMBER 107

0 MEASURED :

. PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.21449E+01

SOIL HORIZON NUMBER 108 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.57 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.044	0.150E+05
0.057	0.600E+04
0.099	0.200E+04
0.143	0.100E+04
0.174	0.330E+03
0.198	0.100E+03
0.220	0.600E+02
0.294	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

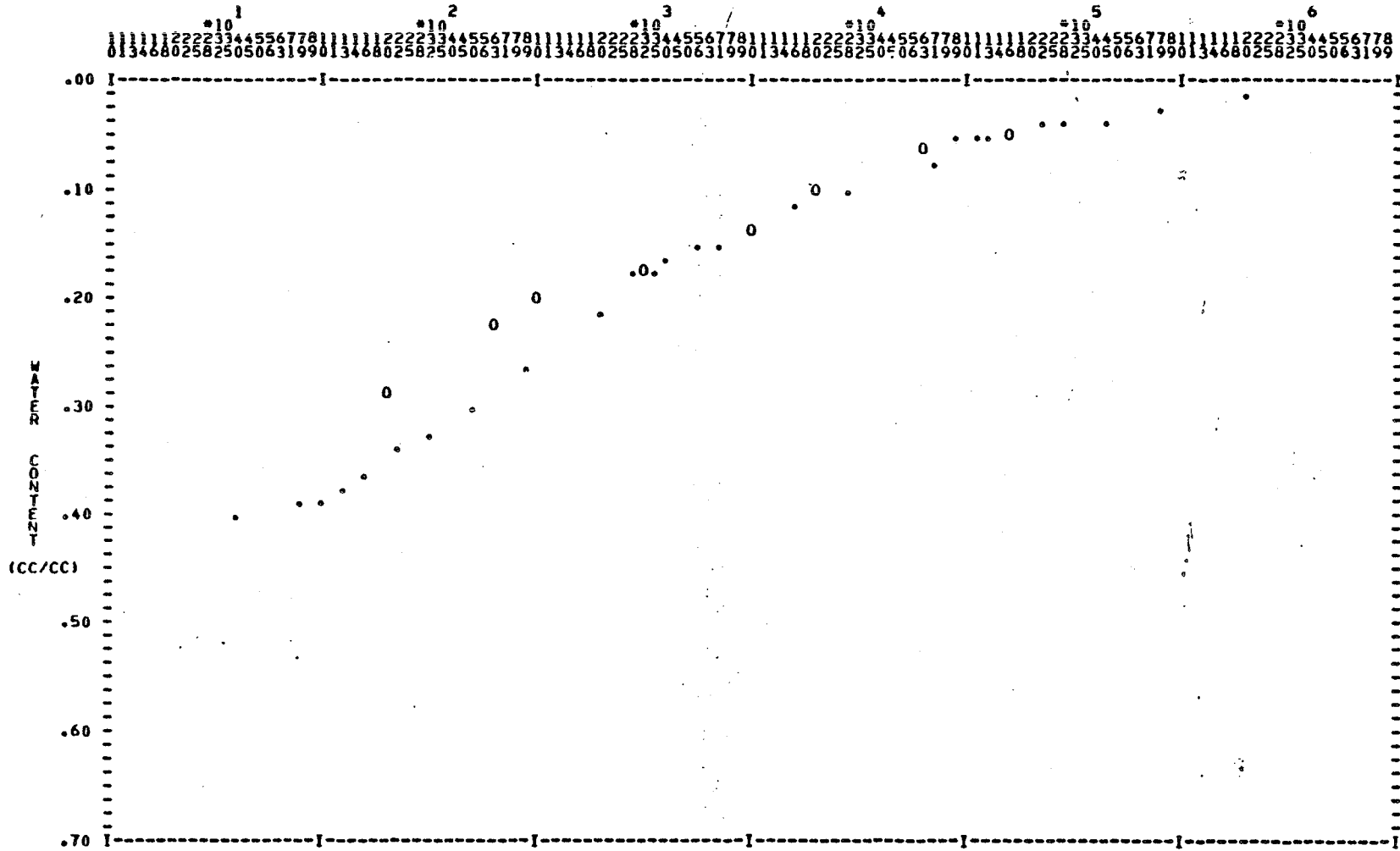
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	4.6	0.046
2.00	6.6	0.020
3.00	7.8	0.012
4.00	8.7	0.010
5.00	9.6	0.009
6.00	10.5	0.009
7.00	11.3	0.008
8.00	12.1	0.008
9.00	12.9	0.008
10.00	13.7	0.008
20.00	22.1	0.074
30.00	26.7	0.056
40.00	30.8	0.041
50.00	34.0	0.032
60.00	36.6	0.026
70.00	38.8	0.022
80.00	40.7	0.019
90.00	42.4	0.017
100.00	44.0	0.016
200.00	58.7	0.147
300.00	68.7	0.100
400.00	76.0	0.073
500.00	81.6	0.056
600.00	86.2	0.046
700.00	90.0	0.038
800.00	93.0	0.030
900.00	95.4	0.024
1000.00	97.2	0.018
2000.00	100.0	0.028

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.013	0.19466E+06
0.029	0.79105E+06
0.034	0.44876E+06
0.037	0.29836E+06
0.041	0.21644E+06
0.044	0.16583E+06
0.048	0.13205E+06
0.051	0.10817E+06
0.054	0.90517E+05
0.071	0.67411E+05
0.097	0.28734E+05
0.117	0.15932E+05
0.132	0.10242E+05
0.144	0.71853E+04
0.154	0.53544E+04
0.162	0.44172E+04
0.169	0.33359E+04
0.176	0.22774E+04
0.209	0.20699E+04
0.260	0.86233E+03
0.295	0.47875E+03
0.321	0.30695E+03
0.342	0.21555E+03
0.359	0.16006E+03
0.373	0.12226E+03
0.384	0.96104E+02
0.392	0.76490E+02
0.402	0.40637E+02

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 108

0 MEASURED ;

. PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PPIP))) = 0.17469E+01

SOIL HORIZON NUMBER 109 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.72 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.064	0.150E+05
0.076	0.600E+04
0.110	0.200E+04
0.089	0.100E+04
0.127	0.330E+03
0.153	0.100E+03
0.172	0.600E+02
0.234	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	7.3	0.073
2.00	8.7	0.014
3.00	9.7	0.010
4.00	10.6	0.009
5.00	11.5	0.009
6.00	12.3	0.008
7.00	13.0	0.007
8.00	13.7	0.007
9.00	14.3	0.006
10.00	15.0	0.006
20.00	19.8	0.048
30.00	23.8	0.040
40.00	27.3	0.036
50.00	30.4	0.031
60.00	33.0	0.026
70.00	35.4	0.024
80.00	37.7	0.022
90.00	39.8	0.020
100.00	42.0	0.018
200.00	57.6	0.156
300.00	67.5	0.099
400.00	74.5	0.071
500.00	80.0	0.055
600.00	84.5	0.044
700.00	88.3	0.038
800.00	91.5	0.033
900.00	94.4	0.028
1000.00	97.0	0.026
2000.00	100.0	0.030

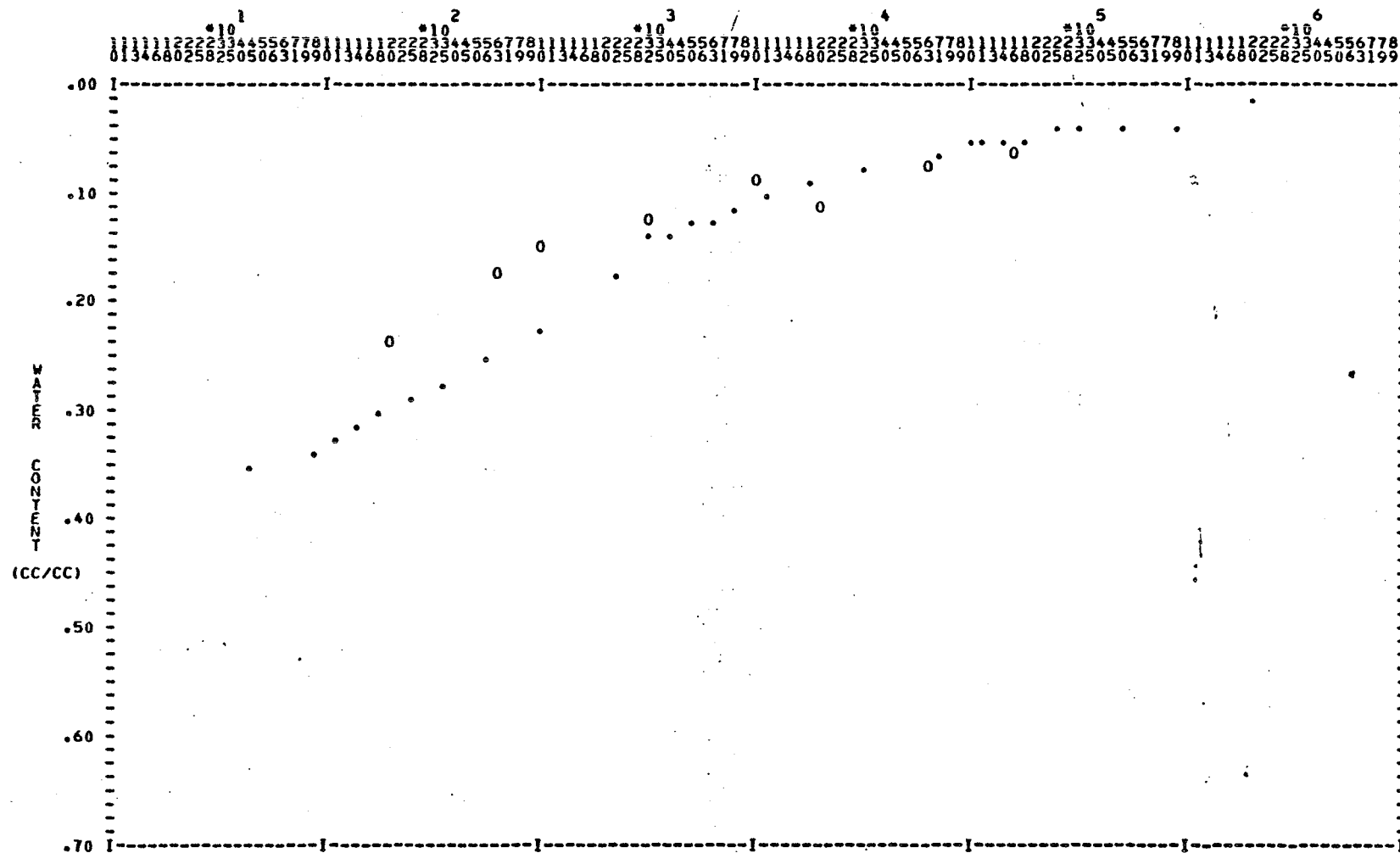
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.015	0.20603E+06
0.014	0.86537E+06
0.013	0.50383E+06
0.012	0.33438E+06
0.011	0.24043E+06
0.010	0.18245E+06
0.009	0.14391E+06
0.008	0.11688E+06
0.007	0.97109E+05
0.006	0.70227E+05
0.005	0.50333E+05
0.004	0.37502E+05
0.003	0.27474E+05
0.002	0.19366E+05
0.001	0.13488E+05
0.000	0.84922E+04
0.000	0.53902E+04
0.000	0.33190E+04
0.000	0.23608E+04
0.000	0.16367E+04
0.000	0.11469E+04
0.000	0.80337E+03
0.000	0.54620E+03
0.000	0.37248E+03
0.000	0.24753E+03
0.000	0.16441E+03

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



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SOIL HORIZON NUMBER 110 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.78 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.048	0.150E+05
0.057	0.600E+04
0.065	0.200E+04
0.082	0.100E+04
0.100	0.330E+03
0.112	0.100E+03
0.126	0.600E+02
0.198	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

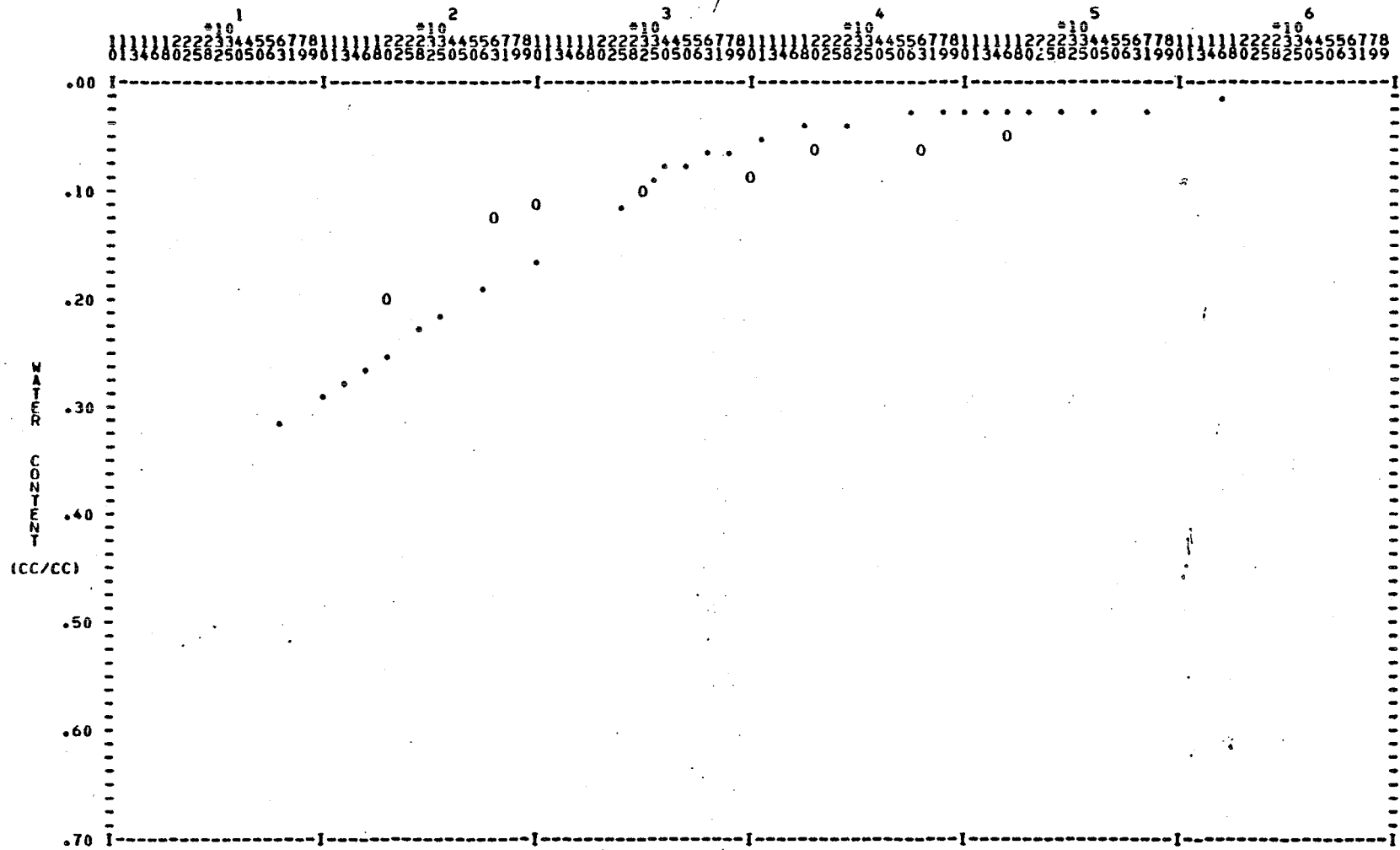
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	6.2	0.062
2.00	6.4	0.002
3.00	6.6	0.002
4.00	6.9	0.003
5.00	7.1	0.003
6.00	7.4	0.002
7.00	7.6	0.002
8.00	7.8	0.002
9.00	8.0	0.002
10.00	8.2	0.002
20.00	9.7	0.015
30.00	11.8	0.021
40.00	14.3	0.025
50.00	16.7	0.024
60.00	18.9	0.022
70.00	21.1	0.022
80.00	23.2	0.022
90.00	25.4	0.021
100.00	27.5	0.021
200.00	43.4	0.150
300.00	53.3	0.100
400.00	60.8	0.074
500.00	66.7	0.059
600.00	72.6	0.059
700.00	78.4	0.059
800.00	83.5	0.051
900.00	87.7	0.041
1000.00	90.8	0.031
2000.00	100.0	0.092

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.011	0.14970E+06
0.011	0.67831E+05
0.011	0.41573E+05
0.011	0.28020E+05
0.011	0.20268E+05
0.011	0.15416E+05
0.011	0.12168E+05
0.011	0.98791E+04
0.011	0.82017E+04
0.011	0.58929E+04
0.011	0.28198E+04
0.011	0.17282E+04
0.011	0.11494E+04
0.011	0.82679E+03
0.011	0.63394E+03
0.011	0.50579E+03
0.011	0.41534E+03
0.011	0.34864E+03
0.011	0.24909E+03
0.011	0.10221E+03
0.011	0.97015E+02
0.011	0.36809E+02
0.011	0.26797E+02
0.011	0.20619E+02
0.011	0.16056E+02
0.011	0.12669E+02
0.011	0.10079E+02
0.011	0.60436E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ) -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 110

0 MEASURED 1

. PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.41423E+01

SOIL HORIZON NUMBER 111 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.33 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.049	0.150E+05
0.065	0.600E+04
0.089	0.200E+04
0.164	0.100E+04
0.192	0.330E+03
0.209	0.100E+03
0.237	0.600E+02
0.354	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	1.5	0.015
2.00	3.5	0.020
3.00	4.8	0.013
4.00	5.9	0.011
5.00	7.0	0.010
6.00	7.9	0.009
7.00	8.8	0.009
8.00	9.6	0.008
9.00	10.4	0.008
10.00	11.2	0.008
20.00	17.4	0.062
30.00	22.4	0.050
40.00	26.2	0.038
50.00	29.0	0.028
60.00	30.9	0.019
70.00	32.3	0.014
80.00	33.5	0.012
90.00	34.8	0.012
100.00	36.0	0.012
200.00	49.5	0.135
300.00	60.8	0.113
400.00	69.3	0.085
500.00	75.8	0.065
600.00	81.1	0.053
700.00	85.6	0.045
800.00	89.5	0.038
900.00	92.7	0.033
1000.00	95.5	0.028
2000.00	100.0	0.045

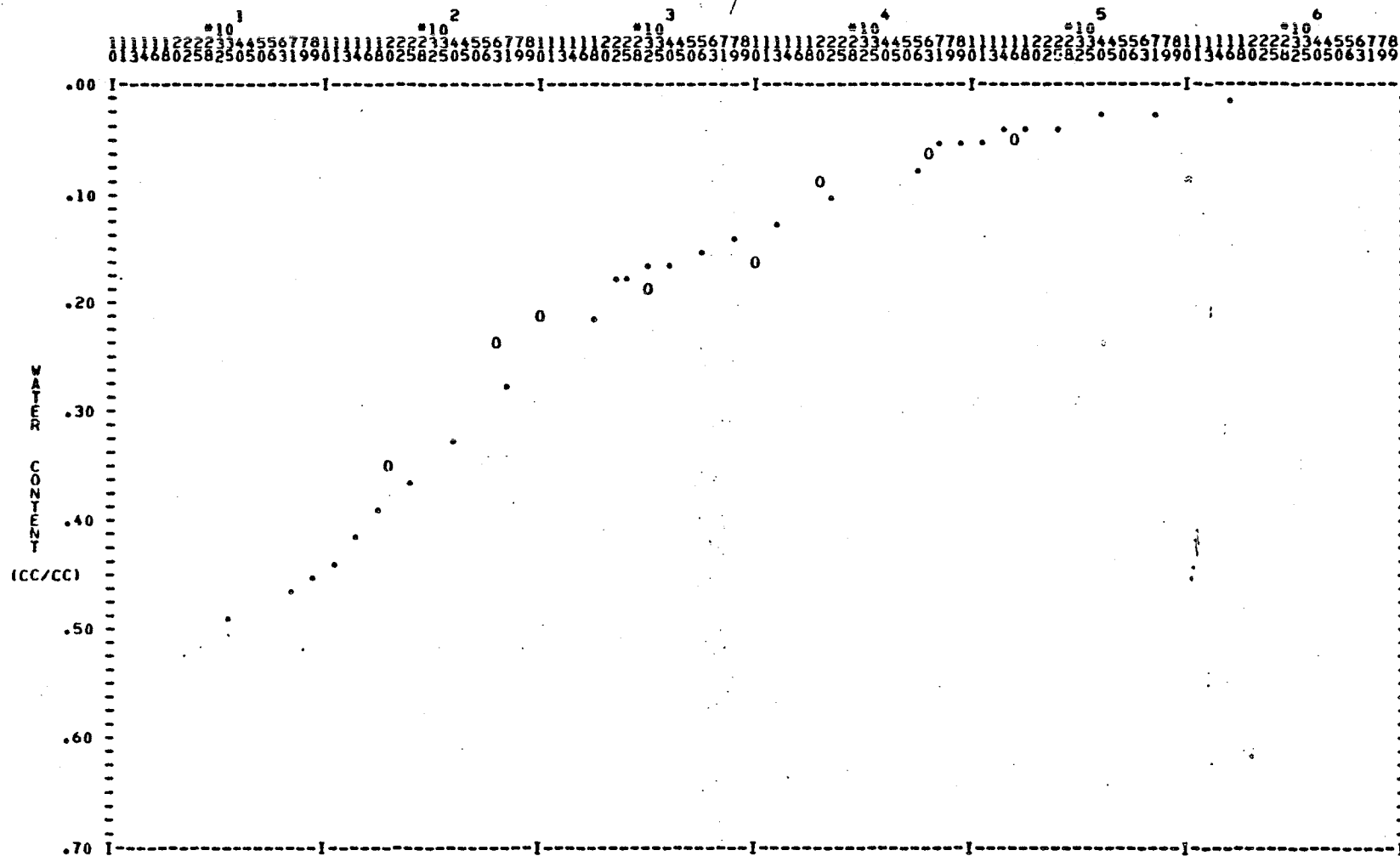
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.009	0.16266E+06
0.021	0.67314E+05
0.027	0.38627E+05
0.032	0.25547E+05
0.037	0.18365E+05
0.042	0.13950E+05
0.046	0.11020E+05
0.050	0.89641E+04
0.054	0.74600E+04
0.071	0.54345E+04
0.099	0.23363E+04
0.121	0.13109E+04
0.138	0.83136E+03
0.149	0.56445E+03
0.157	0.41005E+03
0.164	0.31936E+03
0.170	0.26126E+03
0.176	0.22083E+03
0.213	0.16937E+03
0.255	0.73522E+02
0.324	0.41014E+02
0.361	0.26317E+02
0.391	0.18477E+02
0.415	0.13762E+02
0.436	0.10654E+02
0.454	0.84928E+01
0.469	0.69259E+01
0.487	0.37023E+01

ALPHA = 1.38



SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 111

O MEASURED

. PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.18310E+01

SOIL HORIZON NUMBER 112 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.37 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.058	0.150E+05
0.070	0.600E+04
0.101	0.200E+04
0.184	0.100E+04
0.195	0.330E+03
0.212	0.100E+03
0.278	0.600E+02
0.332	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

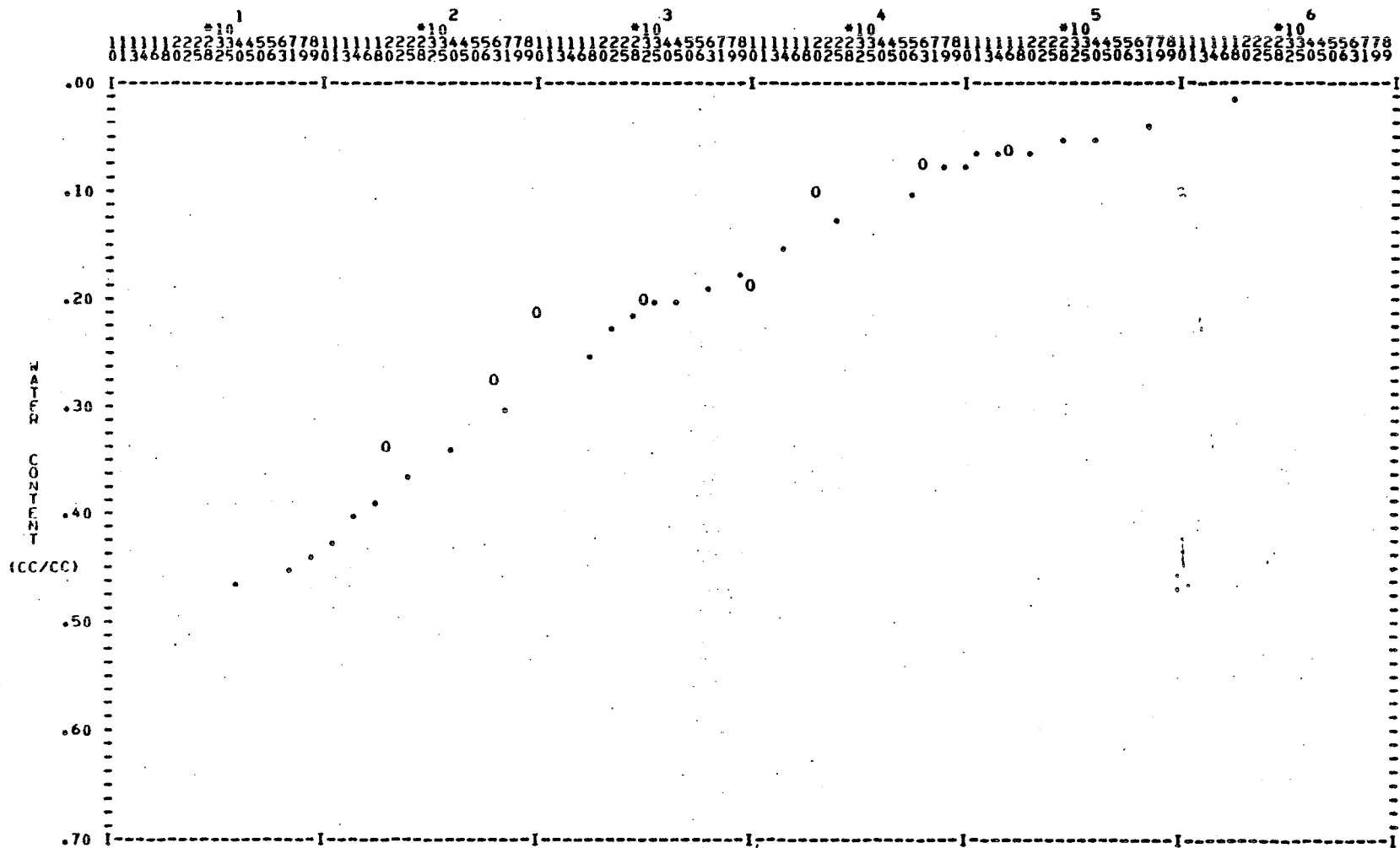
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	4.3	0.043
2.00	7.1	0.028
3.00	8.8	0.017
4.00	10.2	0.014
5.00	11.4	0.012
6.00	12.5	0.011
7.00	13.6	0.011
8.00	14.6	0.010
9.00	15.5	0.010
10.00	16.5	0.009
20.00	24.3	0.078
30.00	29.6	0.056
40.00	33.0	0.040
50.00	37.0	0.031
60.00	39.5	0.025
70.00	41.7	0.021
80.00	43.5	0.018
90.00	45.1	0.016
100.00	46.8	0.015
200.00	54.2	0.076
300.00	66.6	0.124
400.00	72.9	0.063
500.00	77.9	0.050
600.00	82.1	0.042
700.00	85.8	0.037
800.00	89.0	0.032
900.00	91.7	0.027
1000.00	94.0	0.023
2000.00	100.0	0.060

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.017	0.17867E+06
0.038	0.72999E+05
0.046	0.41312E+05
0.052	0.27211E+05
0.058	0.19550E+05
0.063	0.14862E+05
0.068	0.11755E+05
0.073	0.95765E+04
0.077	0.79817E+04
0.098	0.58533E+04
0.131	0.24639E+04
0.154	0.13612E+04
0.171	0.87408E+03
0.185	0.61378E+03
0.196	0.45734E+03
0.206	0.35546E+03
0.314	0.20520E+03
0.352	0.23459E+03
0.353	0.16979E+03
0.361	0.71518E+02
0.337	0.43019E+02
0.364	0.25755E+02
0.386	0.18194E+02
0.405	0.13654E+02
0.422	0.10604E+02
0.436	0.84591E+01
0.448	0.68905E+01
0.469	0.40302E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 112

O MEASURED ;

. PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.22395E+01

SOIL HORIZON NUMBER 113 ( SEE TABLE 4 FOR IDENTIFICATION )

# DENSITY DATA:

BULK DENSITY = 1.55 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

# MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.070	0.150E+05
0.101	0.600E+04
0.112	0.200E+04
0.170	0.100E+04
0.189	0.330E+03
0.201	0.100E+03
0.209	0.600E+02
0.284	0.200E+02

# PARTICLE SIZE DISTRIBUTION DATA

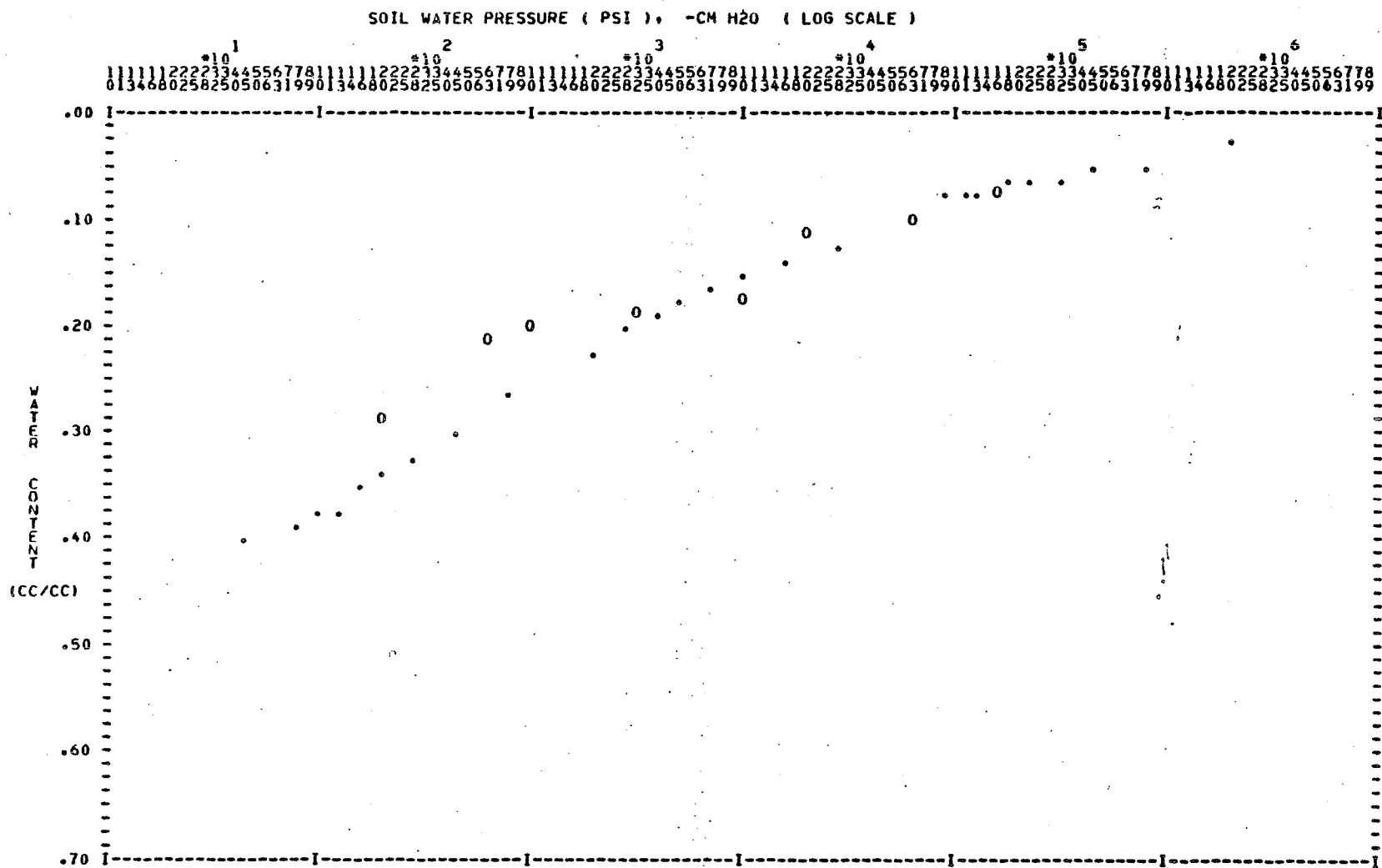
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	8.4	0.084
2.00	8.9	0.025
3.00	22.5	0.016
4.00	33.8	0.013
5.00	55.0	0.011
6.00	77.0	0.011
7.00	88.0	0.010
8.00	88.0	0.009
9.00	88.8	0.009
10.00	97.7	0.008
20.00	26.4	0.067
30.00	31.3	0.049
40.00	35.1	0.038
50.00	38.1	0.030
60.00	40.6	0.025
70.00	42.8	0.023
80.00	44.8	0.018
90.00	46.6	0.016
100.00	48.5	0.015
200.00	60.5	0.123
300.00	68.0	0.084
400.00	75.1	0.062
500.00	79.9	0.048
600.00	83.9	0.040
700.00	87.4	0.035
800.00	90.5	0.030
900.00	93.1	0.026
1000.00	95.3	0.022
2000.00	100.0	0.047

# PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.023	0.20022E+06
0.049	0.82501E+05
0.055	0.47842E+05
0.060	0.49991E+05
0.064	0.30221E+05
0.069	0.22848E+05
0.073	0.16848E+05
0.076	0.13291E+05
0.080	0.10800E+05
0.086	0.89801E+04
0.096	0.65257E+04
0.120	0.27549E+04
0.138	0.15437E+04
0.152	0.99942E+03
0.163	0.70502E+03
0.173	0.52715E+03
0.182	0.41195E+03
0.190	0.31260E+03
0.197	0.27534E+03
0.226	0.19683E+03
0.268	0.82118E+02
0.269	0.52714E+02
0.292	0.29386E+02
0.322	0.20729E+02
0.340	0.15516E+02
0.356	0.12050E+02
0.369	0.96217E+01
0.381	0.78533E+01
0.391	0.44146E+01
0.405	

ALPHA = 1.38

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SOIL HORIZON NUMBER 114 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.73 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.054	0.150E+05
0.062	0.600E+04
0.074	0.200E+04
0.080	0.100E+04
0.082	0.100E+03
0.092	0.100E+03
0.102	0.100E+03
0.138	0.200E+02
0.218	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

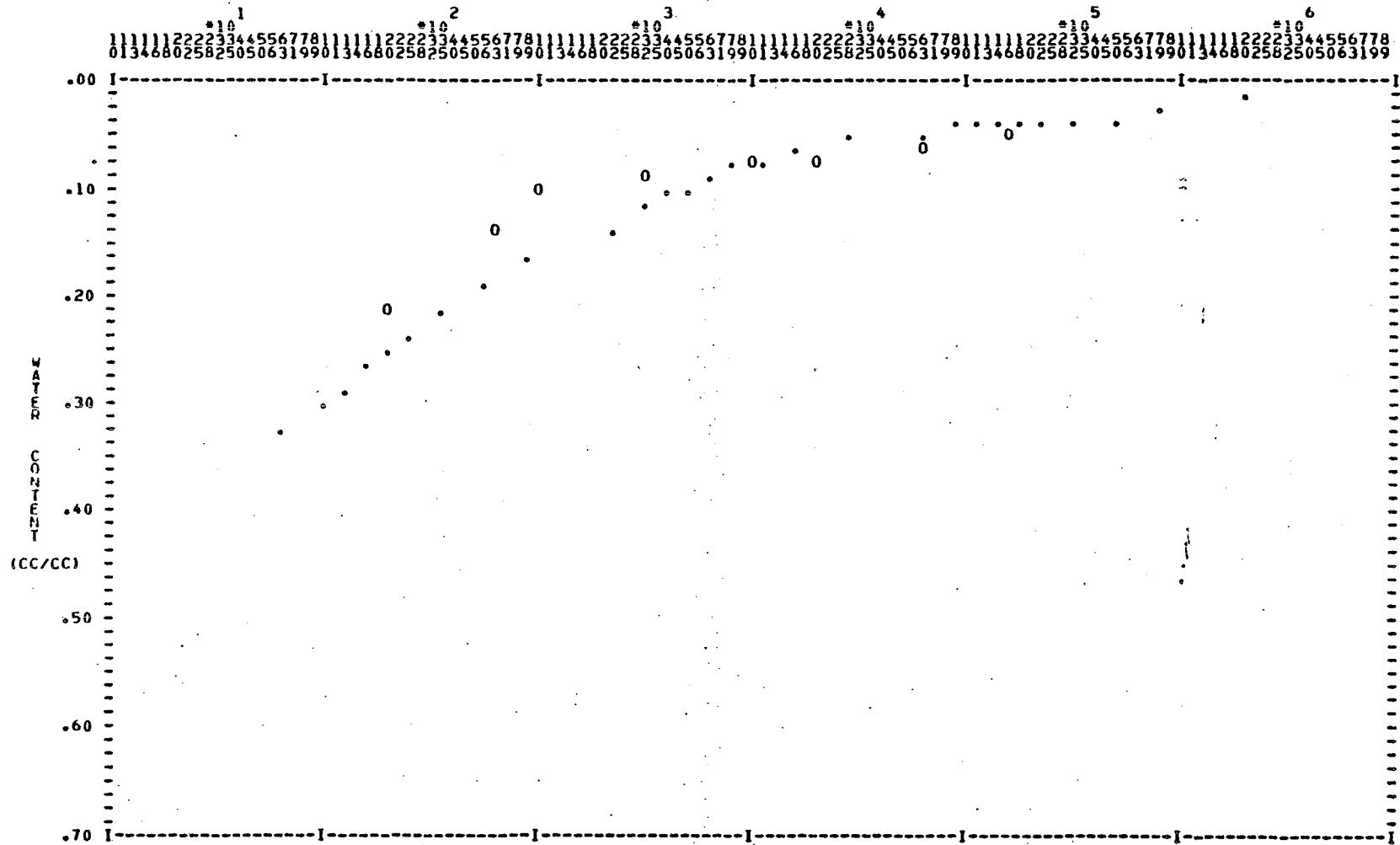
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	7.0	0.070
2.00	8.0	0.010
3.00	9.7	0.007
4.00	9.4	0.007
5.00	10.1	0.006
6.00	10.5	0.006
7.00	11.1	0.005
8.00	11.6	0.005
9.00	11.0	0.004
10.00	11.0	0.004
20.00	11.0	0.028
30.00	11.0	0.020
40.00	11.0	0.021
50.00	11.0	0.023
60.00	11.0	0.024
70.00	11.0	0.023
80.00	11.0	0.021
90.00	11.0	0.019
100.00	11.0	0.017
200.00	44.0	0.120
300.00	50.0	0.078
400.00	51.0	0.067
500.00	64.0	0.055
600.00	64.0	0.055
700.00	75.0	0.054
800.00	79.0	0.048
900.00	83.0	0.040
1000.00	87.0	0.032
2000.00	100.0	0.130

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.014	0.19400E+06
0.029	0.82384E+05
0.032	0.48127E+05
0.034	0.31815E+05
0.036	0.22751E+05
0.038	0.17160E+05
0.039	0.13466E+05
0.041	0.10879E+05
0.042	0.89945E+04
0.046	0.63718E+04
0.056	0.26831E+04
0.063	0.15940E+04
0.071	0.10941E+04
0.079	0.80345E+03
0.087	0.61333E+03
0.099	0.44829E+03
0.102	0.38993E+03
0.108	0.32135E+03
0.132	0.22638E+03
0.166	0.83350E+02
0.191	0.53550E+02
0.211	0.34496E+02
0.250	0.25316E+02
0.291	0.19466E+02
0.351	0.15198E+02
0.420	0.12071E+02
0.496	0.97130E+01
0.525	0.61874E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ) , -CM H2O ( LOG SCALE )



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SOIL HORIZON NUMBER 114

O MEASURED ;

. PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PPIP))) = 0.30919E+01

SOIL HORIZON NUMBER 115 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.77 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.037	0.150E+05
0.044	0.600E+04
0.055	0.200E+04
0.074	0.100E+04
0.089	0.330E+03
0.094	0.100E+03
0.101	0.600E+02
0.186	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	4.4	0.044
2.00	4.8	0.004
3.00	5.1	0.003
4.00	5.4	0.003
5.00	5.7	0.003
6.00	6.0	0.003
7.00	6.3	0.003
8.00	6.5	0.002
9.00	6.7	0.002
10.00	6.9	0.002
20.00	8.5	0.016
30.00	9.9	0.014
40.00	11.3	0.015
50.00	12.8	0.015
60.00	14.2	0.014
70.00	15.5	0.013
80.00	16.7	0.012
90.00	17.8	0.011
100.00	18.7	0.009
200.00	25.5	0.068
300.00	30.8	0.054
400.00	38.4	0.076
500.00	46.1	0.077
600.00	53.9	0.078
700.00	61.5	0.076
800.00	68.3	0.068
900.00	74.0	0.057
1000.00	78.6	0.046
2000.00	100.0	0.214

PREDICTED MOISTURE CHARACTERISTIC DATA

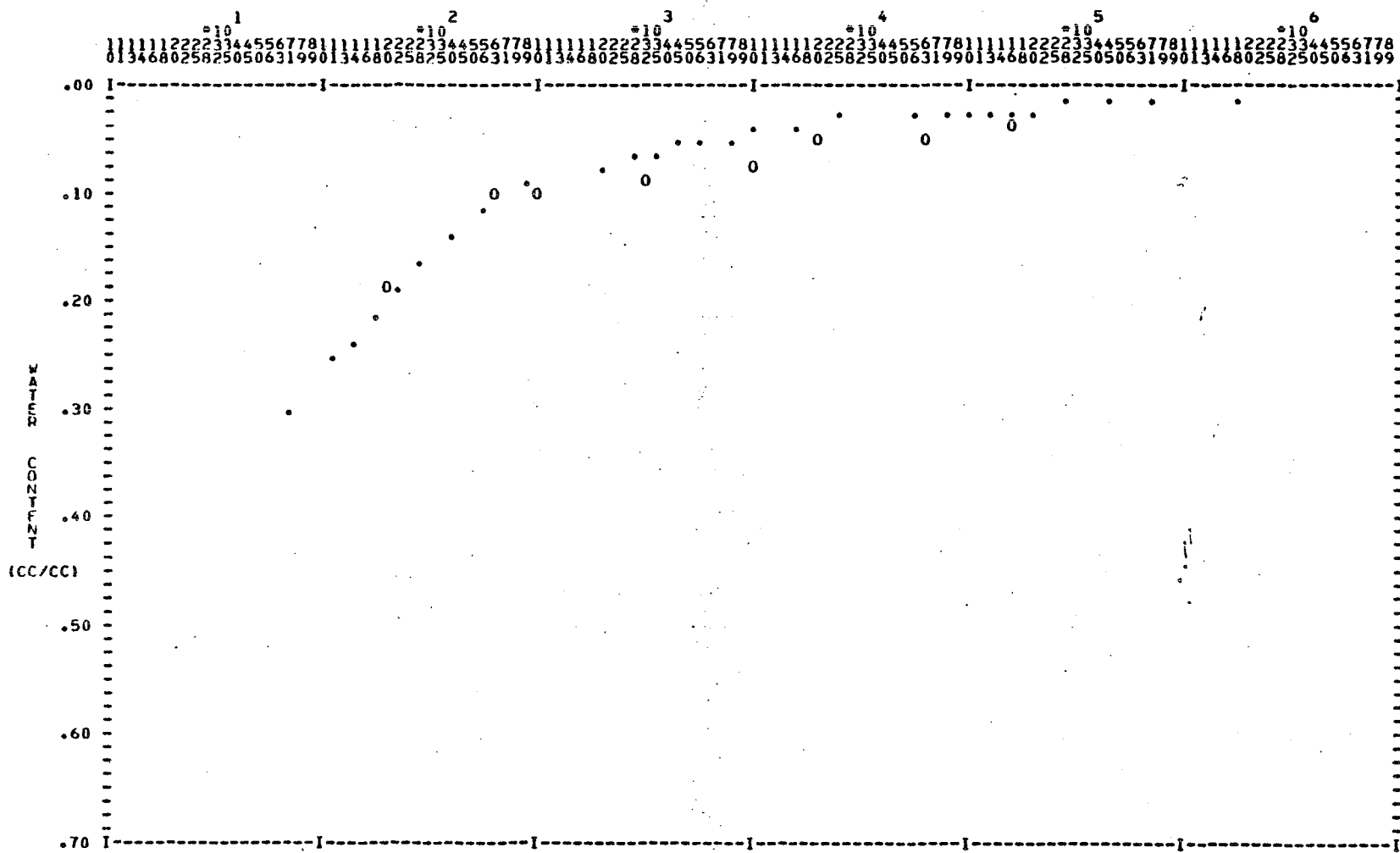
SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.008	0.16834E+06
0.016	0.72332E+05
0.017	0.42851E+05
0.019	0.28555E+05
0.019	0.20540E+05
0.020	0.15572E+05
0.021	0.12225E+05
0.022	0.99437E+04
0.023	0.82469E+04
0.026	0.59137E+04
0.031	0.25840E+04
0.035	0.15425E+04
0.040	0.10394E+04
0.045	0.75335E+03
0.049	0.57144E+03
0.054	0.44762E+03
0.057	0.35987E+03
0.061	0.29543E+03
0.073	0.21001E+03
0.093	0.90096E+02
0.115	0.56789E+02
0.140	0.38317E+02
0.166	0.28803E+02
0.192	0.21501E+02
0.216	0.16795E+02
0.236	0.13351E+02
0.253	0.10758E+02
0.297	0.70348E+01

ALPHA = 1.38



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SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 116 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.49 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.030	0.150E+05
0.037	0.600E+04
0.055	0.200E+04
0.143	0.100E+04
0.168	0.330E+03
0.213	0.100E+03
0.301	0.600E+02
0.340	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	3.1	0.031
2.00	4.2	0.011
3.00	5.0	0.008
4.00	5.7	0.007
5.00	6.4	0.007
6.00	7.0	0.006
7.00	7.5	0.006
8.00	8.0	0.005
9.00	8.5	0.005
10.00	9.0	0.005
12.00	12.7	0.037
15.00	15.7	0.030
20.00	18.3	0.025
30.00	20.3	0.020
40.00	21.9	0.016
50.00	23.3	0.015
60.00	25.0	0.015
70.00	26.6	0.016
80.00	28.0	0.016
90.00	29.5	0.017
100.00	30.5	0.010
120.00	36.0	0.055
150.00	46.0	0.100
200.00	60.0	0.140
300.00	70.0	0.100
400.00	78.0	0.080
500.00	84.0	0.060
600.00	89.0	0.050
700.00	92.0	0.030
800.00	95.0	0.030
900.00	96.0	0.010
1000.00	96.0	0.010
2000.00	100.0	0.032

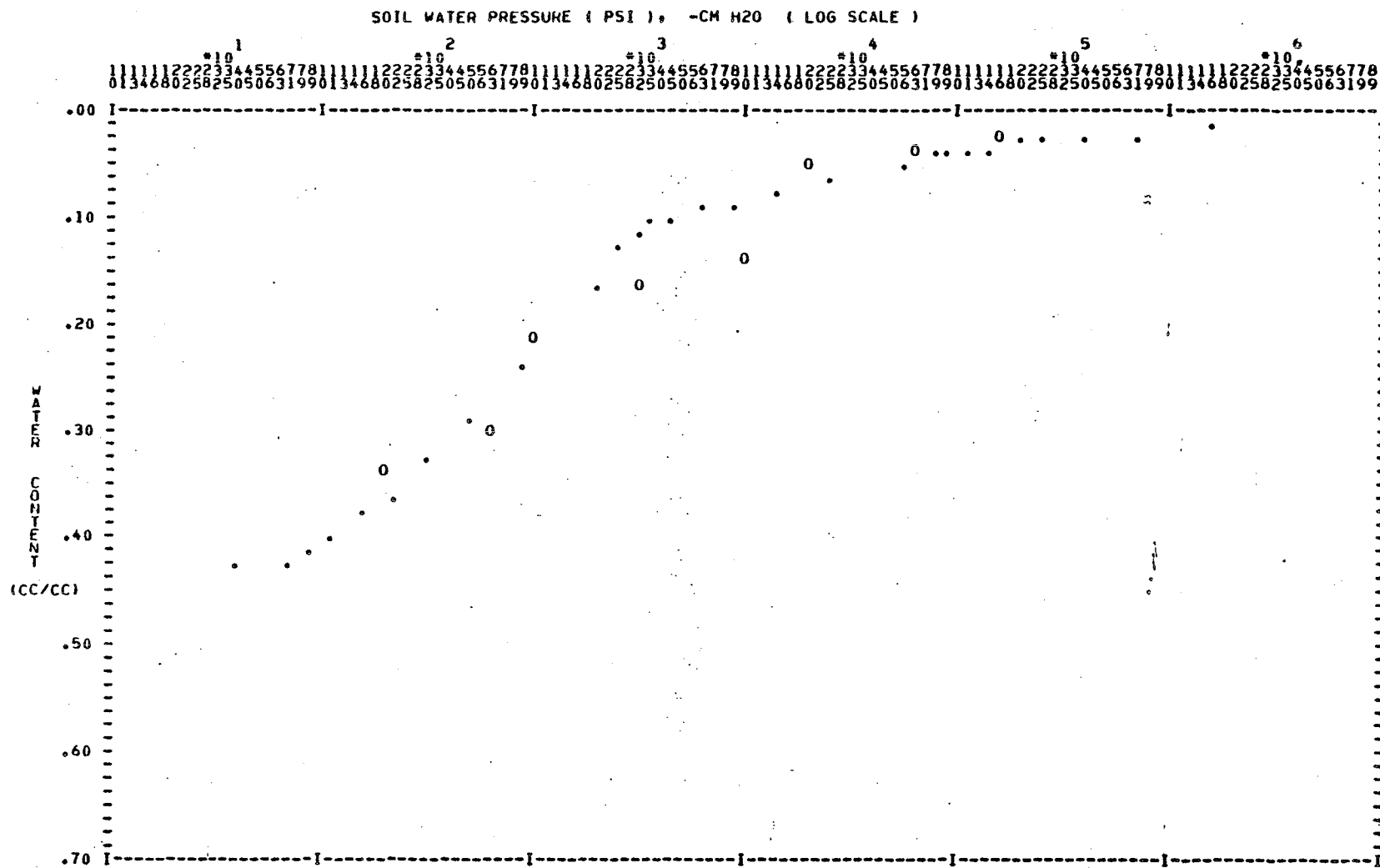
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.009	0.16516E+06
0.020	0.69040E+05
0.023	0.39969E+05
0.026	0.26477E+05
0.029	0.19023E+05
0.032	0.14431E+05
0.034	0.11383E+05
0.036	0.92448E+04
0.038	0.76818E+04
0.047	0.55601E+04
0.062	0.24005E+04
0.074	0.13693E+04
0.084	0.88326E+03
0.092	0.61961E+03
0.099	0.46937E+03
0.106	0.37515E+03
0.113	0.31036E+03
0.120	0.26291E+03
0.164	0.20361E+03
0.235	0.85969E+02
0.288	0.48094E+02
0.327	0.30667E+02
0.357	0.21303E+02
0.380	0.15649E+02
0.398	0.11831E+02
0.411	0.91019E+01
0.420	0.70352E+01
0.431	0.39180E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 116

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.16787E+01

SOIL HORIZON NUMBER 117 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.54 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.054	0.150E+05
0.063	0.600E+04
0.085	0.200E+04
0.120	0.100E+04
0.143	0.330E+03
0.156	0.100E+03
0.194	0.600E+02
0.288	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

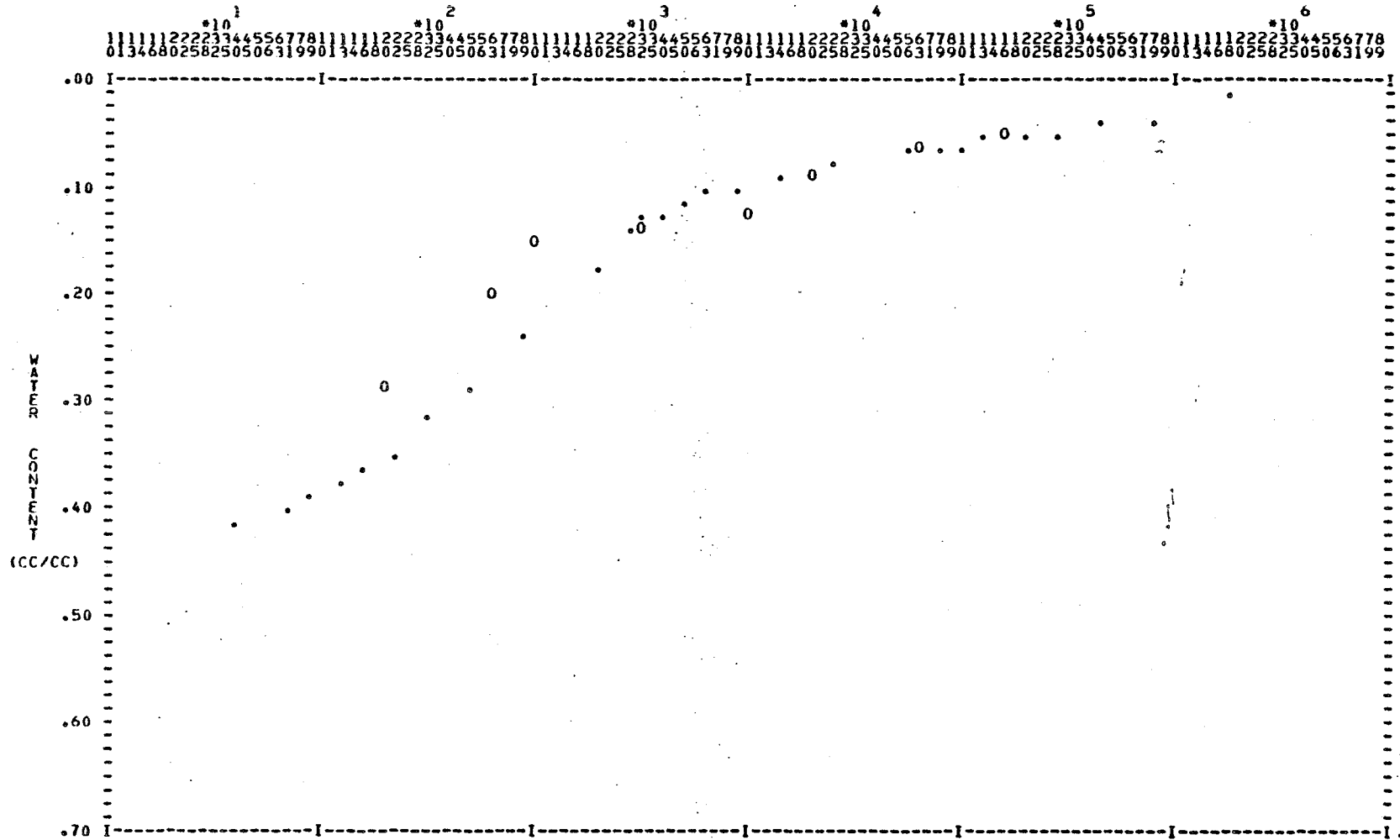
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	7.1	0.071
2.00	8.7	0.016
3.00	9.8	0.011
4.00	10.7	0.009
5.00	11.6	0.008
6.00	12.3	0.007
7.00	12.9	0.006
8.00	13.5	0.006
9.00	14.1	0.006
10.00	14.5	0.004
20.00	18.0	0.035
30.00	20.5	0.025
40.00	22.6	0.021
50.00	24.4	0.018
60.00	26.0	0.016
70.00	27.7	0.017
80.00	29.4	0.018
90.00	31.3	0.018
100.00	33.2	0.019
200.00	50.8	0.176
300.00	63.1	0.123
400.00	72.5	0.094
500.00	79.6	0.071
600.00	85.0	0.054
700.00	89.3	0.043
800.00	92.5	0.032
900.00	94.9	0.024
1000.00	96.5	0.016
2000.00	100.0	0.035

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.018	0.18346E+06
0.039	0.76442E+05
0.043	0.43829E+05
0.047	0.28751E+05
0.050	0.20478E+05
0.053	0.15415E+05
0.055	0.12075E+05
0.058	0.97465E+04
0.060	0.80534E+04
0.068	0.57043E+04
0.081	0.24074E+04
0.090	0.13754E+04
0.099	0.89399E+03
0.106	0.64113E+03
0.112	0.49680E+03
0.120	0.40081E+03
0.127	0.33242E+03
0.135	0.28140E+03
0.176	0.20908E+03
0.238	0.87667E+02
0.284	0.49121E+02
0.316	0.31141E+02
0.345	0.21764E+02
0.365	0.15986E+02
0.381	0.12113E+02
0.393	0.93674E+01
0.401	0.73176E+01
0.412	0.41419E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 117

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P<sub>SIM</sub>)-LOG(P<sub>SIP</sub>))) = 0.18038E+01

SOIL HORIZON NUMBER 118 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.69 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.025	0.150E+05
0.027	0.600E+04
0.032	0.200E+04
0.057	0.100E+04
0.076	0.330E+03
0.086	0.100E+03
0.191	0.600E+02
0.274	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

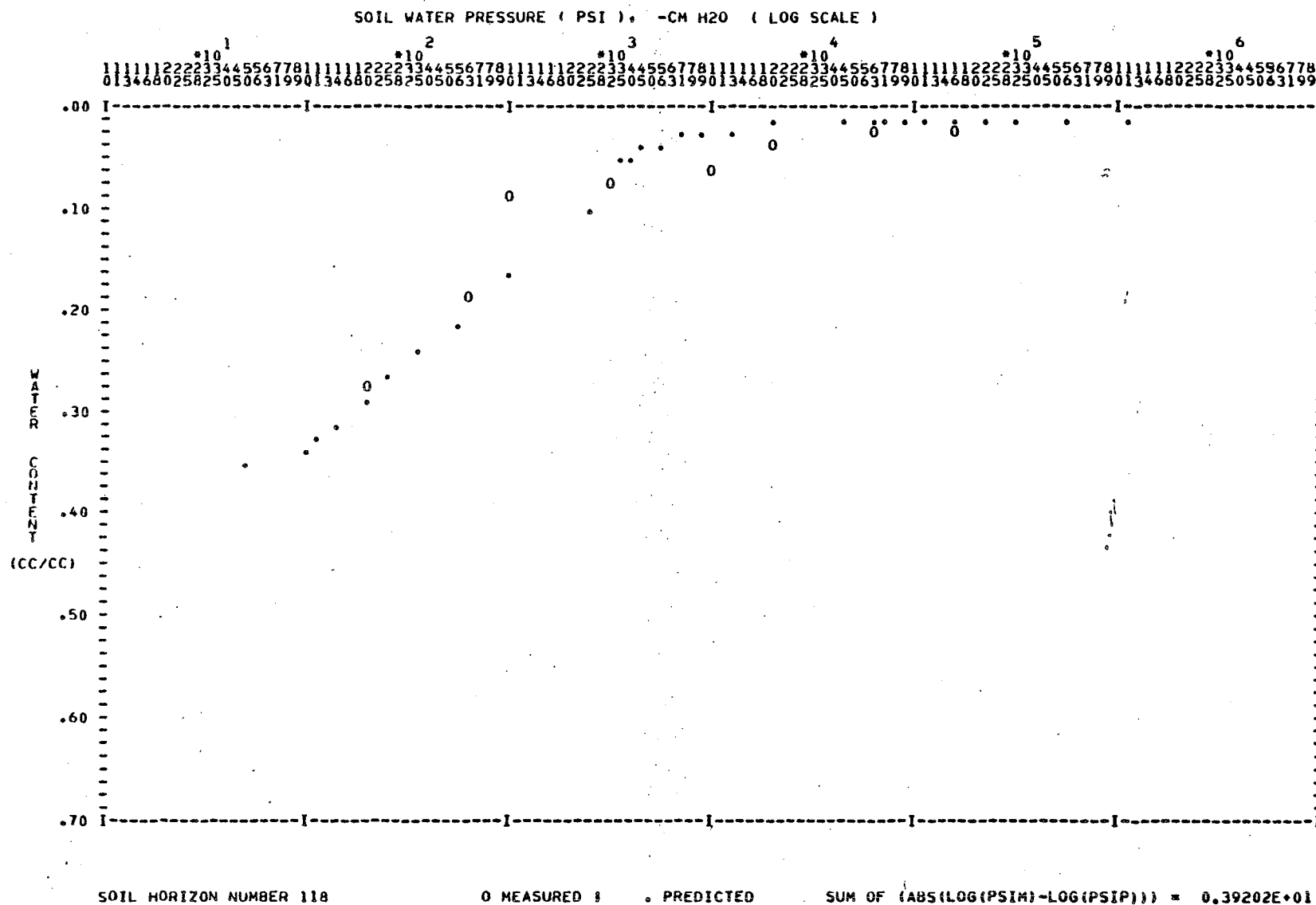
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	3.5	0.035
2.00	3.5	0.001
3.00	3.5	0.001
4.00	3.5	0.001
5.00	3.5	0.001
6.00	4.4	0.001
7.00	4.4	0.001
8.00	4.4	0.001
9.00	4.4	0.001
10.00	4.4	0.001
20.00	4.4	0.004
30.00	5.5	0.006
40.00	6.6	0.008
50.00	6.6	0.007
60.00	7.7	0.011
70.00	9.9	0.017
80.00	11.1	0.021
90.00	14.4	0.024
100.00	15.5	0.027
200.00	21.3	0.023
300.00	22.2	0.006
400.00	22.2	0.006
500.00	22.2	0.079
600.00	22.2	0.065
700.00	22.2	0.055
800.00	27.7	0.047
900.00	31.1	0.040
1000.00	34.4	0.035
2000.00	100.0	0.054

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.007	0.11561E+06
0.013	0.53345E+05
0.014	0.32688E+05
0.014	0.21866E+05
0.014	0.15687E+05
0.015	0.11836E+05
0.015	0.92691E+04
0.015	0.74695E+04
0.015	0.61585E+04
0.016	0.42795E+04
0.018	0.22061E+04
0.021	0.12789E+04
0.027	0.85222E+03
0.032	0.66995E+03
0.032	0.56144E+03
0.039	0.46820E+03
0.047	0.39471E+03
0.056	0.33700E+03
0.099	0.24429E+03
0.164	0.10139E+03
0.208	0.36184E+02
0.241	0.36074E+02
0.267	0.25334E+02
0.288	0.18876E+02
0.307	0.14636E+02
0.323	0.11698E+02
0.336	0.95729E+01
0.352	0.50663E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 119 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.40 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.035	0.150E+05
0.049	0.600E+04
0.071	0.200E+04
0.218	0.100E+04
0.239	0.330E+03
0.256	0.100E+03
0.288	0.600E+02
0.392	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	1.8	0.018
2.00	3.7	0.019
3.00	5.0	0.013
4.00	6.2	0.012
5.00	7.3	0.011
6.00	8.2	0.010
7.00	9.1	0.009
8.00	9.9	0.008
9.00	10.6	0.007
10.00	11.3	0.007
20.00	16.6	0.053
30.00	20.9	0.043
40.00	24.4	0.035
50.00	26.9	0.025
60.00	28.0	0.011
70.00	28.3	0.003
80.00	28.7	0.004
90.00	29.6	0.009
100.00	31.0	0.014
200.00	50.3	0.193
300.00	64.0	0.137
400.00	74.2	0.102
500.00	81.8	0.076
600.00	87.5	0.057
700.00	91.8	0.043
800.00	94.9	0.031
900.00	96.9	0.020
1000.00	98.0	0.011
2000.00	100.0	0.020

PREDICTED MOISTURE CHARACTERISTIC DATA

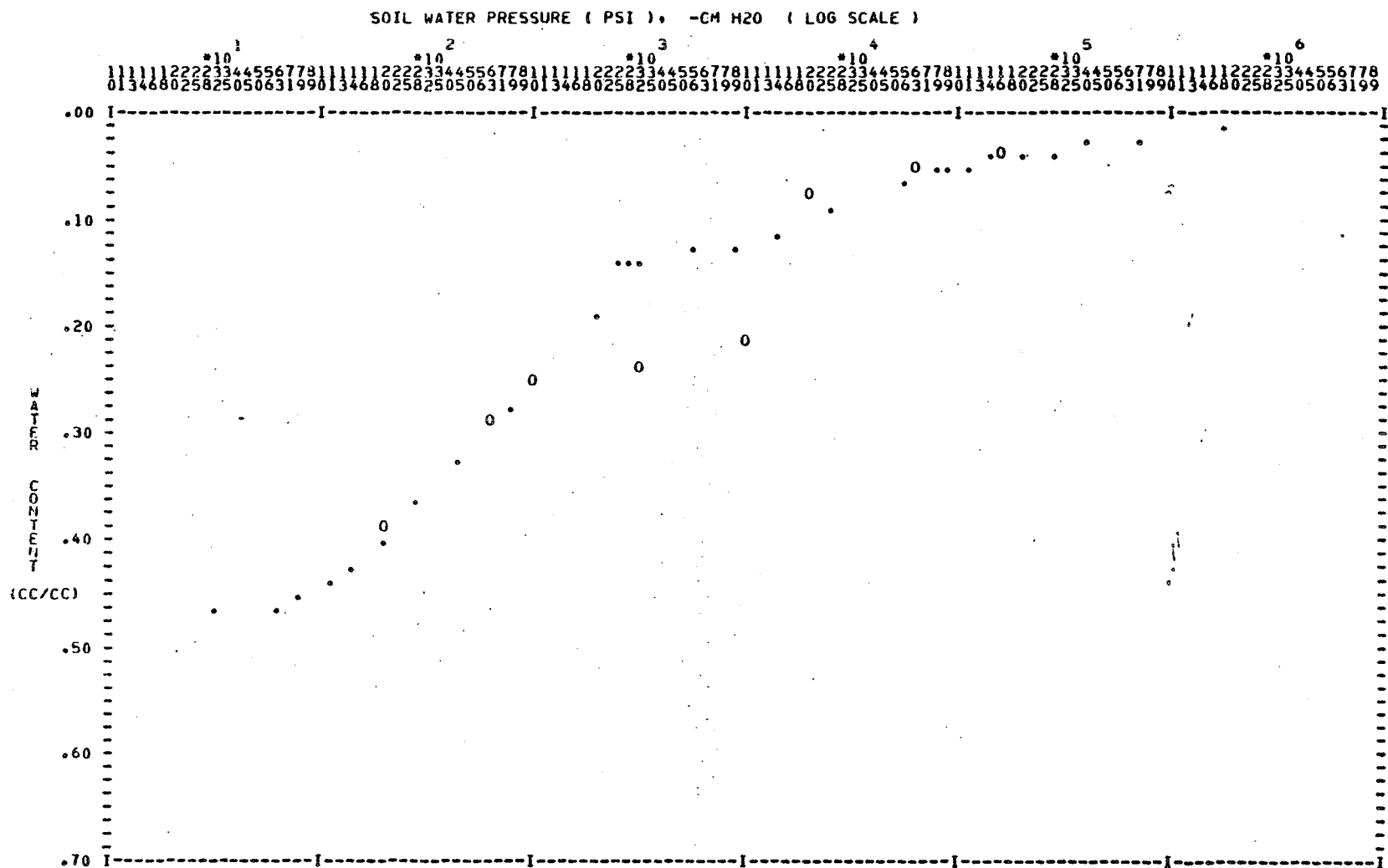
SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.009	0.17051E+06
0.021	0.71208E+05
0.027	0.41063E+05
0.032	0.27085E+05
0.037	0.19385E+05
0.041	0.14656E+05
0.045	0.11525E+05
0.048	0.93360E+04
0.052	0.77392E+04
0.066	0.55524E+04
0.088	0.23970E+04
0.107	0.13580E+04
0.121	0.85803E+03
0.129	0.53549E+03
0.133	0.32299E+03
0.134	0.27202E+03
0.137	0.25819E+03
0.143	0.23940E+03
0.192	0.19130E+03
0.270	0.80348E+02
0.326	0.44802E+02
0.368	0.28530E+02
0.399	0.19739E+02
0.423	0.14389E+02
0.440	0.10773E+02
0.452	0.81638E+01
0.460	0.61247E+01
0.467	0.33460E+01

ALPHA = 1.38



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SOIL HORIZON NUMBER 119

0 MEASURED :

• PREDICTED

SUM OF (ABS(LOG(P<sub>SIM</sub>)-LOG(P<sub>SIP</sub>))) = 0.21085E+01

SOIL HORIZON NUMBER 120 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.60 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.027	0.150E+05
0.045	0.600E+04
0.078	0.200E+04
0.158	0.100E+04
0.166	0.330E+03
0.194	0.100E+03
0.226	0.600E+02
0.304	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	2.6	0.026
2.00	4.9	0.023
3.00	6.5	0.016
4.00	7.8	0.013
5.00	9.0	0.012
6.00	10.1	0.011
7.00	11.0	0.010
8.00	11.9	0.009
9.00	12.7	0.008
10.00	13.5	0.008
20.00	19.2	0.057
30.00	23.7	0.045
40.00	27.2	0.036
50.00	29.8	0.026
60.00	31.0	0.012
70.00	31.5	0.005
80.00	32.0	0.005
90.00	32.9	0.009
100.00	34.3	0.014
200.00	52.6	0.183
300.00	62.6	0.100
400.00	75.4	0.097
500.00	82.5	0.072
600.00	88.2	0.056
700.00	92.4	0.042
800.00	95.4	0.030
900.00	97.4	0.020
1000.00	98.4	0.010
2000.00	100.0	0.016

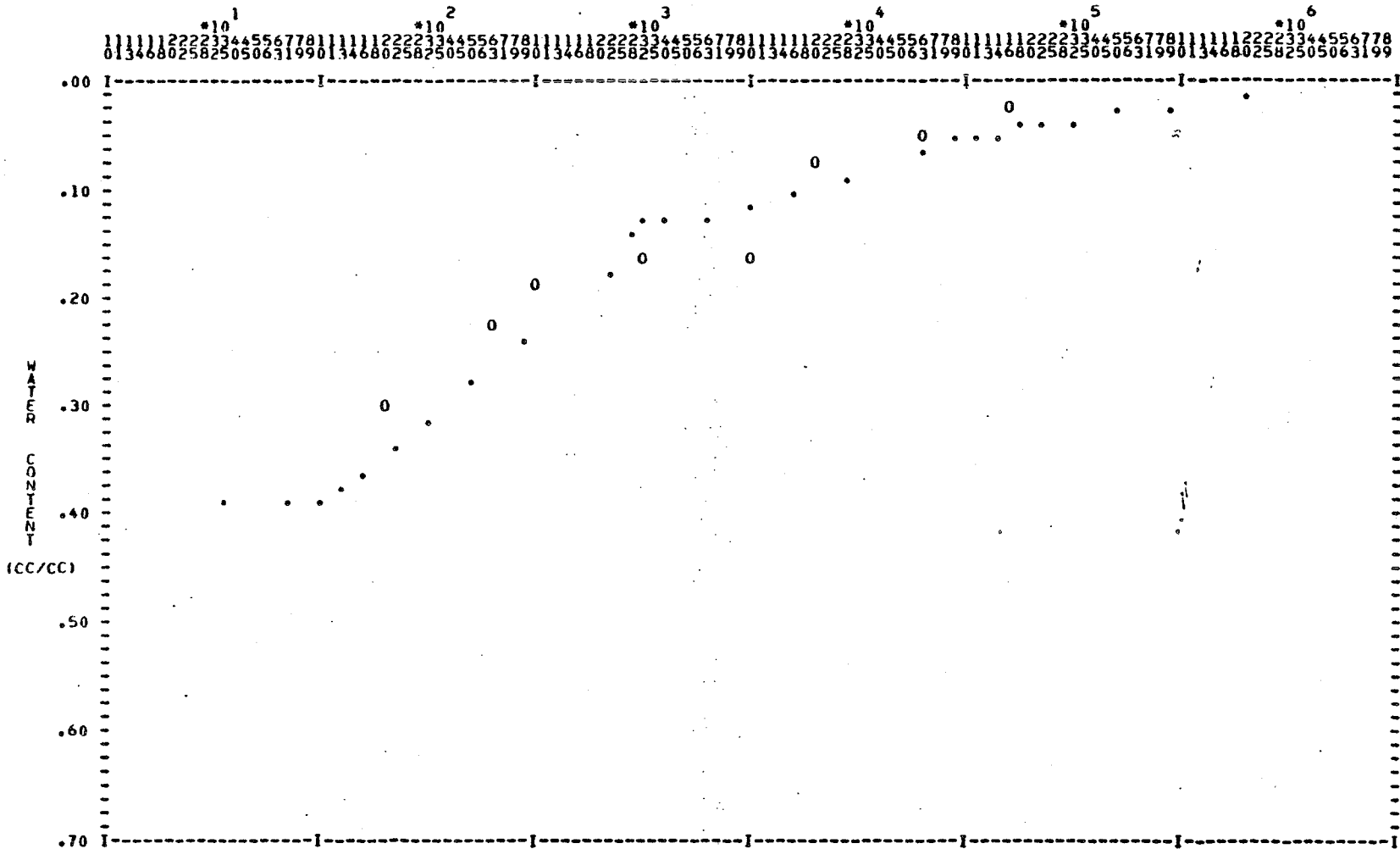
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.010	0.20568E+06
0.023	0.85564E+05
0.028	0.49106E+05
0.033	0.32307E+05
0.038	0.25085E+05
0.043	0.17433E+05
0.049	0.13639E+05
0.055	0.11088E+05
0.063	0.91854E+04
0.065	0.65781E+04
0.085	0.28170E+04
0.101	0.15845E+04
0.113	0.10054E+04
0.120	0.63767E+03
0.124	0.40691E+03
0.126	0.33219E+03
0.129	0.30346E+03
0.133	0.27813E+03
0.172	0.22885E+03
0.234	0.52282E+02
0.277	0.51788E+02
0.339	0.32599E+02
0.358	0.22895E+02
0.358	0.16739E+02
0.377	0.12536E+02
0.388	0.94753E+01
0.393	0.70409E+01

ALPHA = 1.38

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SOIL WATER PRESSURE ( PSI ), -CH H2O ( LOG SCALE )



SOIL HORIZON NUMBER 120

0 MEASURED : . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.27088E+01

SOIL HORIZON NUMBER 121 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.63 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.037	0.150E+05
0.054	0.600E+04
0.091	0.200E+04
0.171	0.100E+04
0.181	0.330E+03
0.199	0.100E+03
0.220	0.600E+02
0.302	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

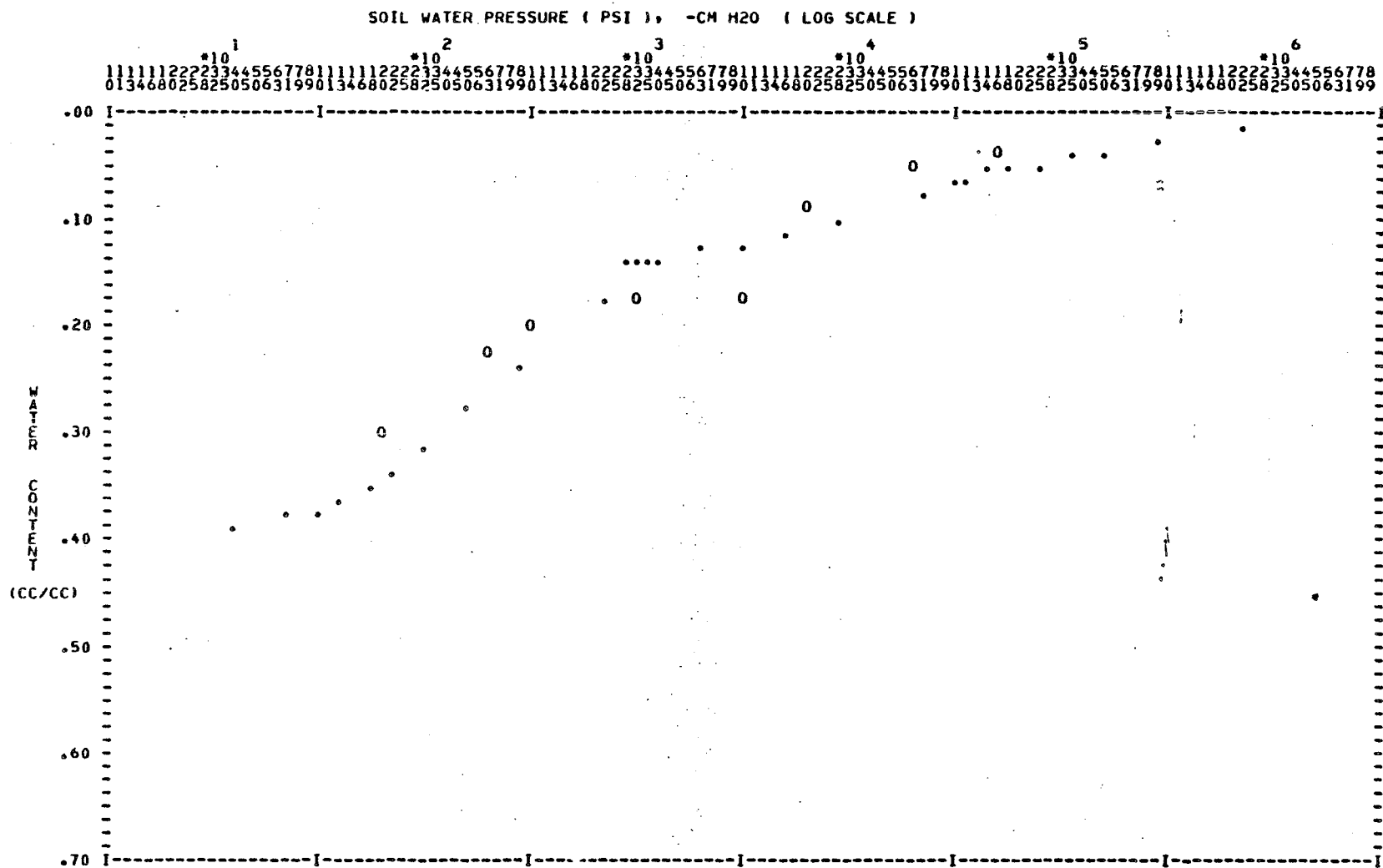
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	4.1	0.041
2.00	6.8	0.027
3.00	8.6	0.018
4.00	10.1	0.015
5.00	11.4	0.013
6.00	12.5	0.012
7.00	13.5	0.010
8.00	14.5	0.009
9.00	15.4	0.009
10.00	16.3	0.008
20.00	22.5	0.060
30.00	26.8	0.046
40.00	30.3	0.036
50.00	32.9	0.026
60.00	34.1	0.012
70.00	34.5	0.004
80.00	35.0	0.005
90.00	35.0	0.000
100.00	35.4	0.015
200.00	35.5	0.181
300.00	35.9	0.124
400.00	37.1	0.093
500.00	38.0	0.069
600.00	39.0	0.053
700.00	39.1	0.036
800.00	39.1	0.027
900.00	39.8	0.017
1000.00	39.9	0.009
2000.00	100.0	0.015

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.013	0.21625E+06
0.030	0.89732E+05
0.036	0.51311E+05
0.041	0.33679E+05
0.046	0.24024E+05
0.050	0.18118E+05
0.054	0.14219E+05
0.058	0.11499E+05
0.061	0.95134E+04
0.074	0.67982E+04
0.094	0.28935E+04
0.110	0.16238E+04
0.123	0.10309E+04
0.126	0.65013E+03
0.132	0.40668E+03
0.134	0.33668E+03
0.136	0.31298E+03
0.141	0.28799E+03
0.179	0.22569E+03
0.238	0.94224E+02
0.270	0.52473E+02
0.310	0.33447E+02
0.333	0.23160E+02
0.351	0.16863E+02
0.364	0.12596E+02
0.372	0.95038E+01
0.377	0.70534E+01
0.382	0.37842E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 122 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.60 G/CM\*\*3  
 PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.088	0.150E+05
0.102	0.600E+04
0.134	0.200E+04
0.189	0.100E+04
0.210	0.330E+03
0.226	0.100E+03
0.026	0.600E+02
0.291	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	13.7	0.137
2.00	15.9	0.022
3.00	17.3	0.014
4.00	18.6	0.012
5.00	19.7	0.011
6.00	20.6	0.010
7.00	21.5	0.009
8.00	22.3	0.008
9.00	23.1	0.007
10.00	23.7	0.007
20.00	29.0	0.053
30.00	33.0	0.040
40.00	36.1	0.031
50.00	38.4	0.023
60.00	39.4	0.010
70.00	39.8	0.003
80.00	40.3	0.005
90.00	41.3	0.010
100.00	43.0	0.017
200.00	61.0	0.180
300.00	72.4	0.115
400.00	80.7	0.082
500.00	86.9	0.062
600.00	91.6	0.047
700.00	94.9	0.033
800.00	97.1	0.022
900.00	98.5	0.013
1000.00	99.1	0.006
2000.00	100.0	0.009

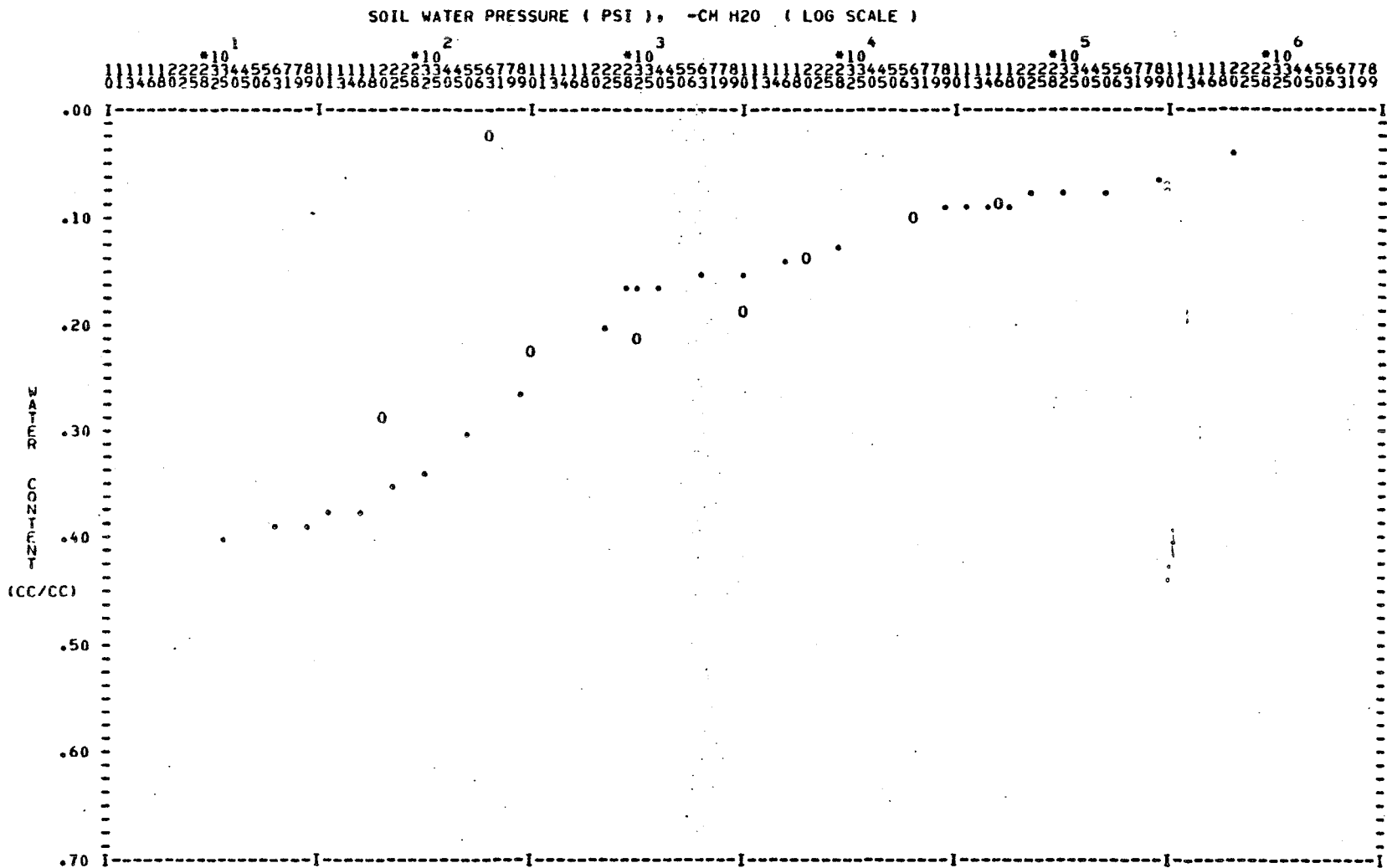
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.031	0.20365E+06
0.066	0.84437E+05
0.071	0.48294E+05
0.076	0.31736E+05
0.080	0.22668E+05
0.083	0.17117E+05
0.087	0.13451E+05
0.090	0.10890E+05
0.093	0.90246E+04
0.105	0.64722E+04
0.123	0.27562E+04
0.137	0.15503E+04
0.148	0.98398E+03
0.154	0.61744E+03
0.157	0.38526E+03
0.159	0.33317E+03
0.162	0.31225E+03
0.167	0.28716E+03
0.206	0.22007E+03
0.264	0.90604E+02
0.303	0.50177E+02
0.332	0.32071E+02
0.354	0.22161E+02
0.369	0.15978E+02
0.380	0.11831E+02
0.388	0.88287E+01
0.391	0.64046E+01
0.394	0.33535E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 122

0 MEASURED : . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.42418E+01

SOIL HORIZON NUMBER 123 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.64 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.051	0.150E+05
0.079	0.600E+04
0.100	0.200E+04
0.141	0.100E+04
0.157	0.330E+03
0.172	0.100E+03
0.218	0.600E+02
0.303	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	11.8	0.118
2.00	12.5	0.007
3.00	13.0	0.005
4.00	13.5	0.005
5.00	14.0	0.005
6.00	14.5	0.004
7.00	14.6	0.004
8.00	15.2	0.004
9.00	15.6	0.004
10.00	15.6	0.003
20.00	18.5	0.026
30.00	20.8	0.023
40.00	22.9	0.021
50.00	24.6	0.017
60.00	25.8	0.012
70.00	26.6	0.011
80.00	28.3	0.013
90.00	29.0	0.016
100.00	31.9	0.020
200.00	57.1	0.252
300.00	71.4	0.143
400.00	80.5	0.091
500.00	86.9	0.064
600.00	91.3	0.044
700.00	94.3	0.030
800.00	96.3	0.020
900.00	97.5	0.012
1000.00	98.2	0.007
2000.00	100.0	0.018

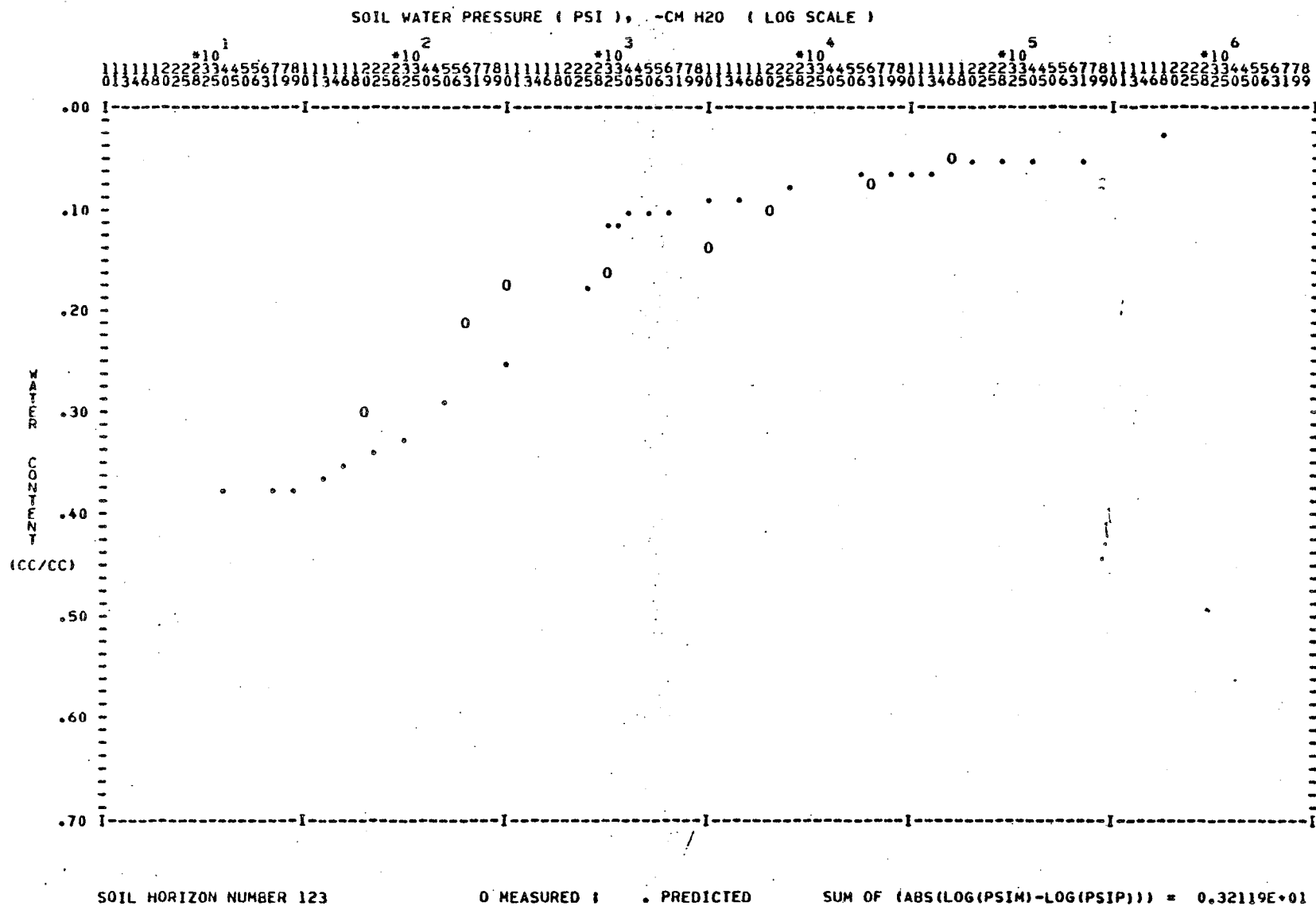
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.024	0.17016E+06
0.049	0.72022E+05
0.051	0.42147E+05
0.053	0.28000E+05
0.054	0.20127E+05
0.056	0.15263E+05
0.057	0.12029E+05
0.059	0.97608E+04
0.060	0.81025E+04
0.066	0.58367E+04
0.075	0.25693E+04
0.083	0.14853E+04
0.091	0.95578E+03
0.096	0.65734E+03
0.101	0.49962E+03
0.105	0.41204E+03
0.111	0.35185E+03
0.118	0.30565E+03
0.170	0.22621E+03
0.245	0.92594E+02
0.289	0.52790E+02
0.319	0.33262E+02
0.340	0.22633E+02
0.354	0.16150E+02
0.363	0.11927E+02
0.369	0.89738E+01
0.373	0.67473E+01
0.378	0.39490E+01

ALPHA = 1.38



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SOIL HORIZON NUMBER 124 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.67 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.020	0.150E+05
0.025	0.600E+04
0.032	0.200E+04
0.073	0.100E+04
0.095	0.330E+03
0.135	0.100E+03
0.167	0.600E+02
0.297	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERV. FRACTION ( G/G )
1.00	3.8	0.038
2.00	3.8	0.000
4.00	3.9	0.001
6.00	3.9	0.001
8.00	4.0	0.001
10.00	4.1	0.001
15.00	4.1	0.001
20.00	4.3	0.001
30.00	4.3	0.001
40.00	4.3	0.000
50.00	4.3	0.003
60.00	5.3	0.007
70.00	5.3	0.008
80.00	6.0	0.008
90.00	6.0	0.006
100.00	6.0	0.001
120.00	6.3	0.002
140.00	7.0	0.010
160.00	8.0	0.020
180.00	10.0	0.031
200.00	13.0	0.047
250.00	40.0	0.167
300.00	57.0	0.199
400.00	79.0	0.091
500.00	85.0	0.068
600.00	85.0	0.048
700.00	93.0	0.033
800.00	95.0	0.022
900.00	95.0	0.014
1000.00	96.0	0.014
2000.00	100.0	0.032

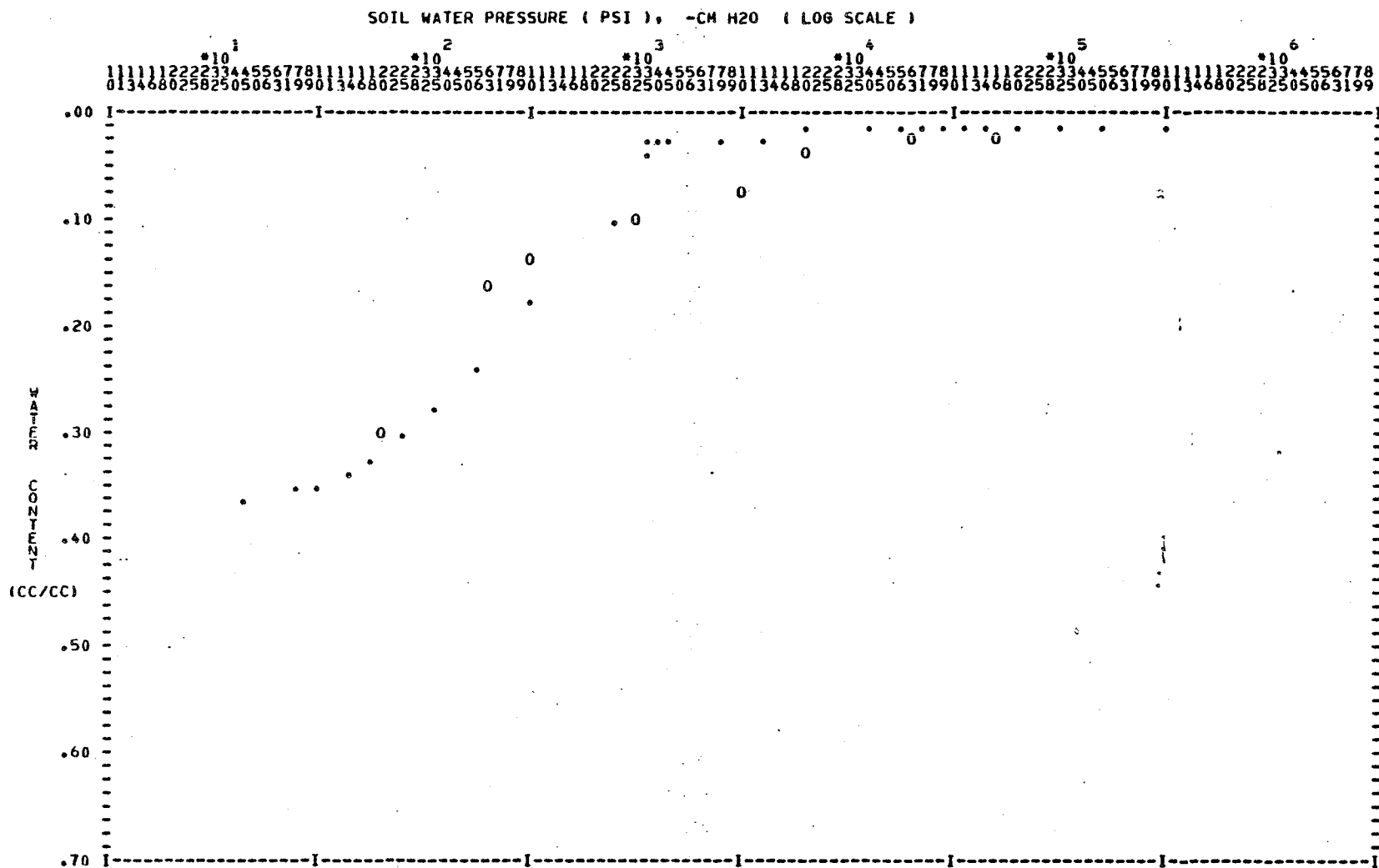
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.007	0.10295E+06
0.014	0.48419E+05
0.014	0.29941E+05
0.015	0.20103E+05
0.015	0.14459E+05
0.015	0.10932E+05
0.015	0.85770E+04
0.016	0.69236E+04
0.016	0.57157E+04
0.016	0.40028E+04
0.018	0.20660E+04
0.021	0.12674E+04
0.024	0.81777E+03
0.025	0.42591E+03
0.026	0.17098E+03
0.028	0.10998E+03
0.032	0.33748E+02
0.034	0.34039E+02
0.039	0.22215E+02
0.041	0.10600E+02
0.043	0.10695E+02
0.044	0.33945E+01
0.045	0.25182E+01
0.046	0.18131E+01
0.046	0.15154E+01
0.048	0.10281E+01
0.055	0.78694E+00
0.064	0.45128E+00

ALPHA = 1.38

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SOIL HORIZON NUMBER 124

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.41790E+01

SOIL HORIZON NUMBER 125 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.66 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.013	0.150E+05
0.023	0.600E+04
0.032	0.200E+04
0.143	0.100E+04
0.149	0.330E+03
0.186	0.100E+03
0.217	0.600E+02
0.314	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	3.0	0.030
2.00	3.2	0.002
3.00	3.3	0.001
4.00	3.3	0.001
5.00	3.4	0.001
6.00	3.6	0.001
7.00	3.7	0.002
8.00	3.9	0.002
9.00	4.2	0.002
10.00	4.4	0.002
20.00	7.0	0.026
30.00	10.8	0.038
40.00	14.6	0.038
50.00	17.5	0.029
60.00	19.7	0.022
70.00	21.6	0.019
80.00	23.4	0.019
90.00	25.3	0.019
100.00	27.3	0.020
200.00	57.2	0.299
300.00	73.7	0.165
400.00	83.5	0.098
500.00	89.7	0.062
600.00	93.6	0.039
700.00	96.2	0.026
800.00	97.9	0.016
900.00	98.8	0.009
1000.00	99.2	0.004
2000.00	100.0	0.008

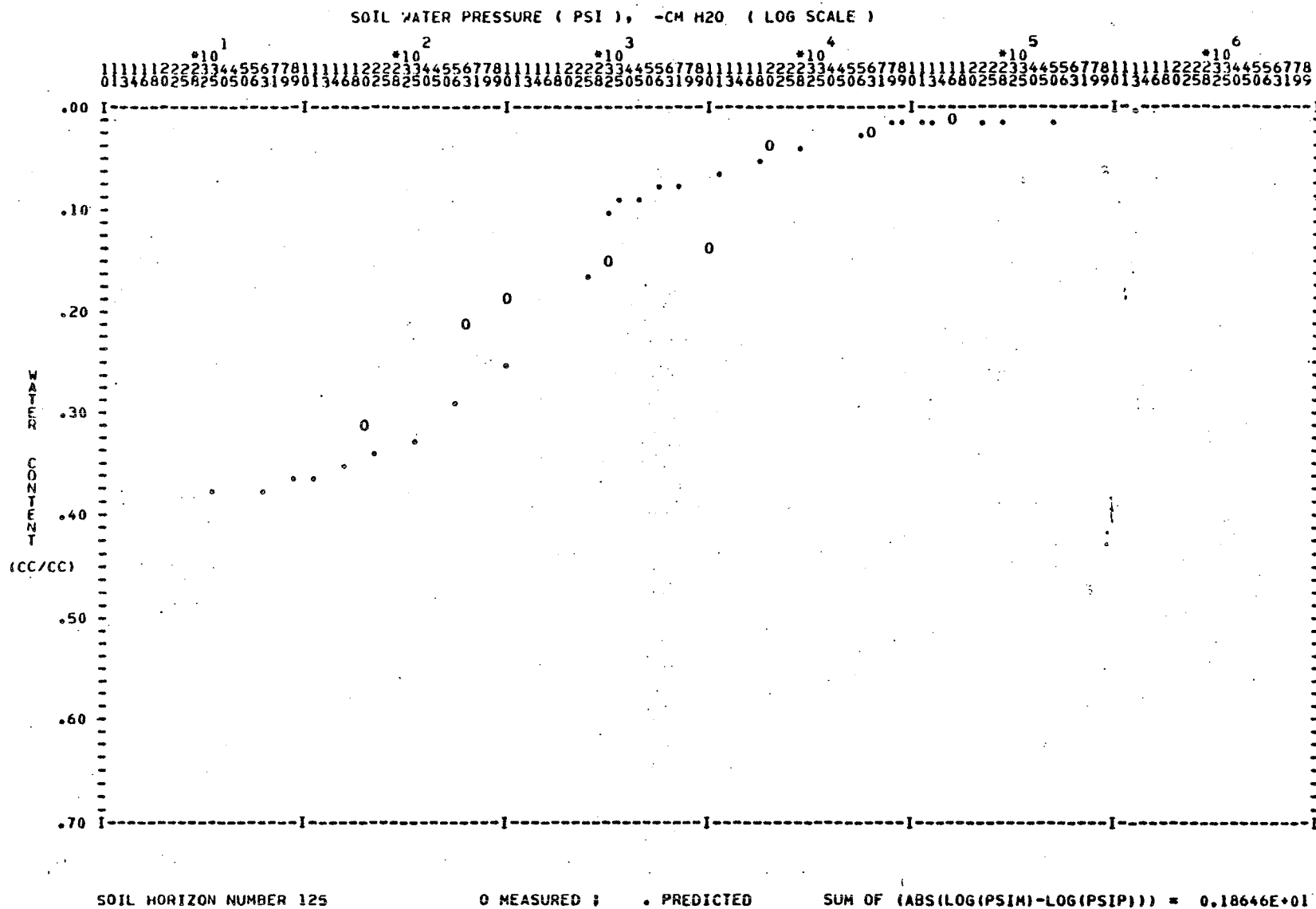
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.006	0.13184E+06
0.012	0.49012E+05
0.012	0.28712E+05
0.013	0.21311E+05
0.013	0.16533E+05
0.014	0.13209E+05
0.014	0.10815E+05
0.015	0.90373E+04
0.016	0.76804E+04
0.021	0.59437E+04
0.033	0.28646E+04
0.047	0.16877E+04
0.060	0.10803E+04
0.069	0.74646E+03
0.077	0.56058E+03
0.084	0.44541E+03
0.091	0.36723E+03
0.098	0.31052E+03
0.158	0.25422E+03
0.244	0.10186E+03
0.294	0.54399E+02
0.324	0.33619E+02
0.342	0.22501E+02
0.355	0.15980E+02
0.363	0.11645E+02
0.367	0.86413E+01
0.370	0.61978E+01
0.372	0.34399E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 126 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.17 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.051	0.150E+05
0.059	0.600E+04
0.070	0.200E+04
0.172	0.100E+04
0.187	0.330E+03
0.229	0.100E+03
0.282	0.600E+02
0.438	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	1.4	0.014
2.00	4.1	0.027
3.00	5.8	0.017
4.00	7.0	0.013
5.00	8.1	0.010
6.00	8.9	0.009
7.00	9.7	0.008
8.00	10.4	0.007
9.00	11.0	0.006
10.00	11.6	0.006
20.00	15.6	0.040
30.00	18.2	0.026
40.00	20.0	0.018
50.00	21.4	0.014
60.00	22.6	0.012
70.00	23.6	0.010
80.00	24.5	0.009
90.00	25.3	0.008
100.00	26.1	0.008
200.00	64.3	0.382
300.00	79.4	0.150
400.00	85.8	0.064
500.00	89.5	0.037
600.00	92.1	0.026
700.00	94.2	0.021
800.00	95.8	0.016
900.00	97.0	0.012
1000.00	97.7	0.007
2000.00	100.0	0.023

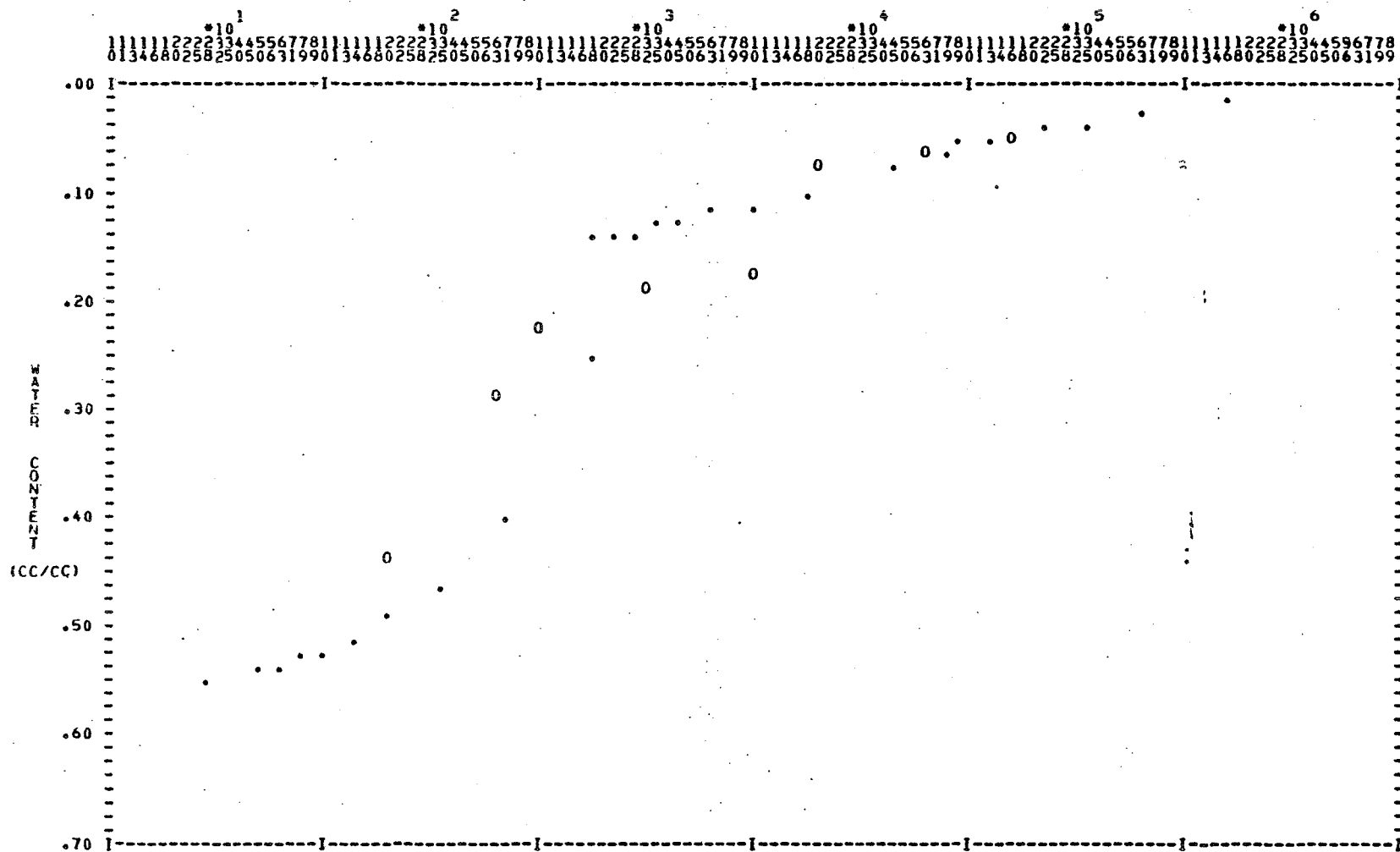
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.011	0.15286E+06
0.028	0.62426E+05
0.036	0.34935E+05
0.042	0.22653E+05
0.047	0.16032E+05
0.052	0.12022E+05
0.056	0.93659E+04
0.060	0.75737E+04
0.063	0.62533E+04
0.076	0.44330E+04
0.094	0.18225E+04
0.106	0.10089E+04
0.116	0.64784E+03
0.123	0.45576E+03
0.129	0.34147E+03
0.134	0.26707E+03
0.139	0.21564E+03
0.144	0.17845E+03
0.253	0.18297E+03
0.401	0.68724E+02
0.461	0.34421E+02
0.489	0.20953E+02
0.507	0.14255E+02
0.520	0.10557E+02
0.531	0.80145E+01
0.538	0.61762E+01
0.544	0.47684E+01
0.552	0.28868E+01

ALPHA = 1.38

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SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 127 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.48 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT.

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.030	0.150E+05
0.038	0.600E+04
0.067	0.200E+04
0.127	0.100E+04
0.141	0.330E+03
0.173	0.100E+03
0.221	0.600E+02
0.337	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	1.2	0.012
4.75	4.8	0.036
7.5	7.0	0.022
15.0	8.6	0.016
25.0	9.9	0.013
35.0	11.0	0.011
45.0	11.9	0.009
55.0	11.7	0.008
65.0	12.4	0.007
75.0	13.0	0.006
85.0	13.7	0.006
95.0	14.9	0.003
105.0	15.0	0.021
115.0	15.4	0.015
125.0	16.0	0.011
135.0	16.4	0.010
145.0	16.4	0.009
155.0	16.4	0.008
165.0	16.4	0.008
175.0	16.4	0.008
185.0	16.4	0.008
195.0	16.4	0.008
200.0	67.3	0.405
250.0	82.3	0.149
300.0	83.0	0.058
400.0	83.0	0.030
500.0	91.0	0.018
600.0	91.0	0.018
700.0	94.5	0.012
800.0	95.5	0.009
900.0	96.4	0.007
1000.0	97.1	0.007
2000.0	100.0	0.029

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

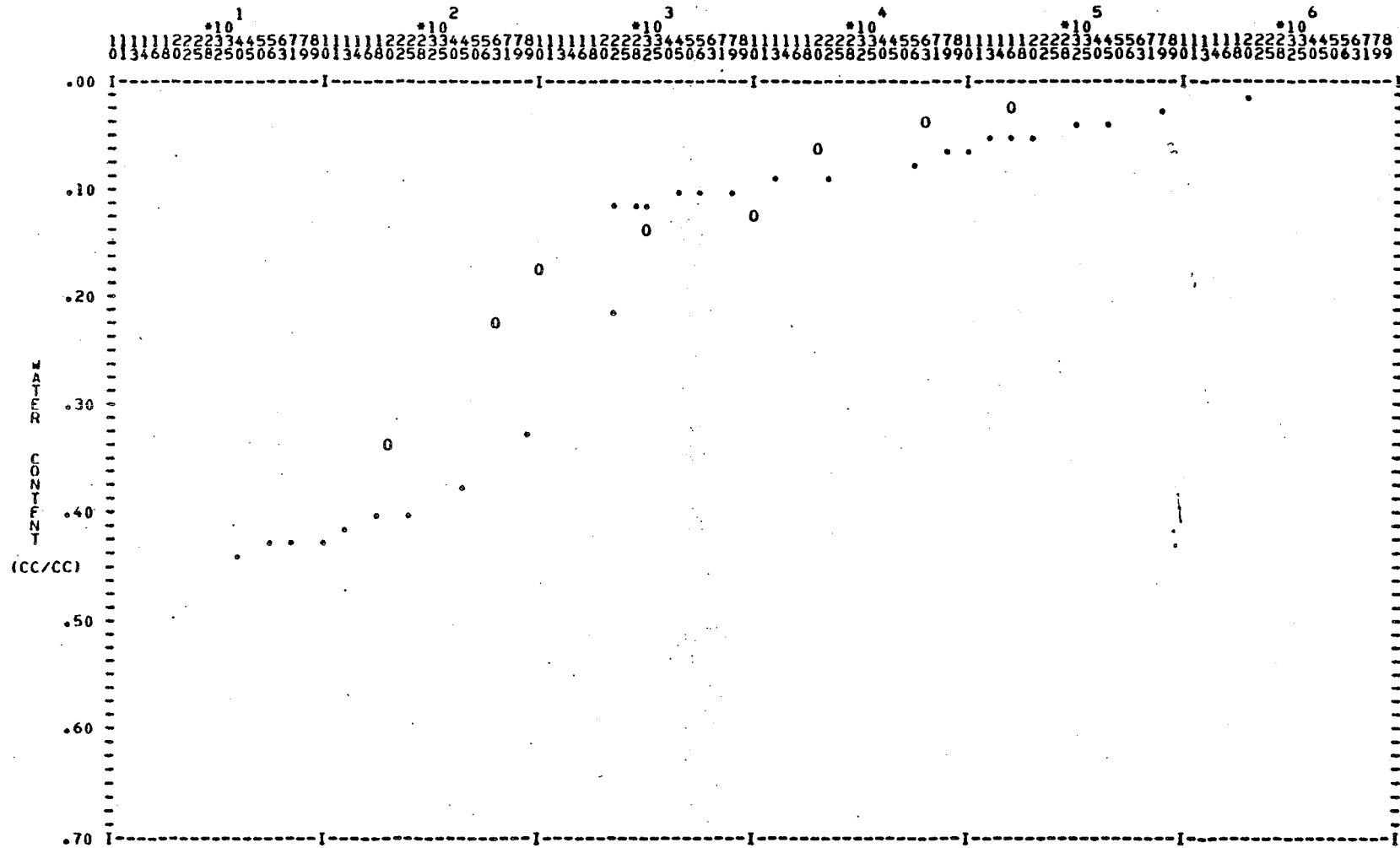
0.011	0.20361E+06
0.026	0.83165E+05
0.034	0.46393E+05
0.041	0.29923E+05
0.046	0.21052E+05
0.050	0.15694E+05
0.054	0.12194E+05
0.057	0.97737E+04
0.060	0.80257E+04
0.070	0.55551E+04
0.083	0.22195E+04
0.091	0.12239E+04
0.097	0.78647E+03
0.101	0.58699E+03
0.106	0.42179E+03
0.109	0.33304E+03
0.113	0.27116E+03
0.117	0.22602E+03
0.208	0.23396E+03
0.330	0.86811E+02
0.376	0.42729E+02
0.395	0.25446E+02
0.406	0.16901E+02
0.413	0.11252E+02
0.419	0.80556E+01
0.424	0.74663E+01
0.427	0.59064E+01
0.435	0.38161E+01

ALPHA = 1.38

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SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 128 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.58 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.046	0.150E+05
0.063	0.600E+04
0.096	0.200E+04
0.150	0.100E+04
0.161	0.330E+03
0.199	0.100E+03
0.243	0.600E+02
0.325	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	5.1	0.051
2.00	8.6	0.035
3.00	10.7	0.021
4.00	12.3	0.016
5.00	13.5	0.013
6.00	14.6	0.010
7.00	15.5	0.009
8.00	16.3	0.008
9.00	17.0	0.007
10.00	17.6	0.006
20.00	22.0	0.044
30.00	24.7	0.027
40.00	26.6	0.019
50.00	28.1	0.015
60.00	29.1	0.010
70.00	29.8	0.007
80.00	30.4	0.006
90.00	31.0	0.006
100.00	31.7	0.007
200.00	67.8	0.361
300.00	81.9	0.141
400.00	87.7	0.058
500.00	90.6	0.029
600.00	92.3	0.017
700.00	93.6	0.014
800.00	94.7	0.011
900.00	95.6	0.009
1000.00	96.3	0.007
2000.00	100.0	0.037

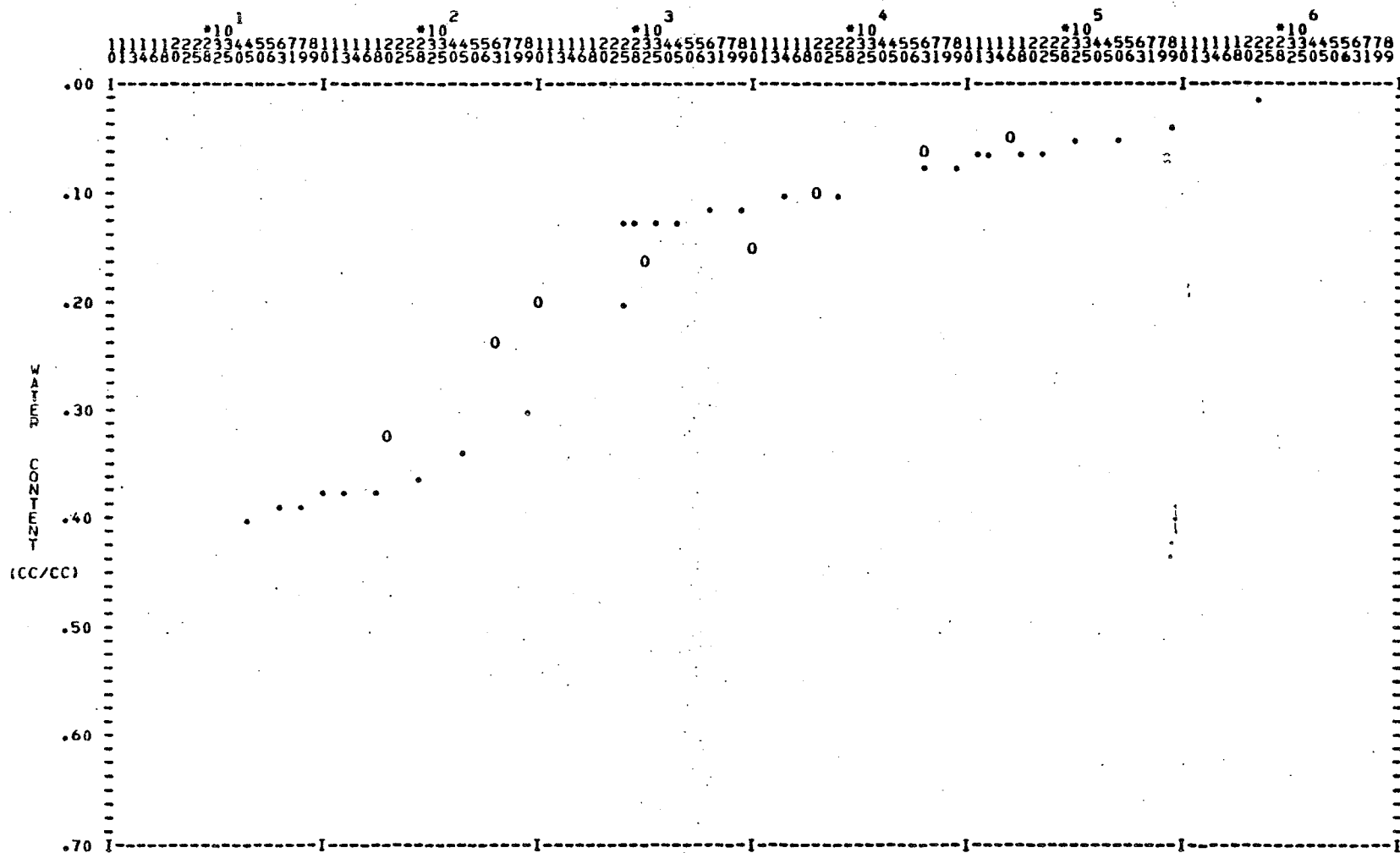
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.017	0.21929E+06
0.039	0.89335E+05
0.046	0.49755E+05
0.052	0.32134E+05
0.057	0.22663E+05
0.061	0.16944E+05
0.064	0.13207E+05
0.067	0.10620E+05
0.070	0.87498E+04
0.080	0.61517E+04
0.094	0.25144E+04
0.104	0.13929E+04
0.110	0.89359E+03
0.116	0.60664E+03
0.119	0.43324E+03
0.122	0.33695E+03
0.124	0.27833E+03
0.127	0.23824E+03
0.201	0.24733E+03
0.302	0.92759E+02
0.342	0.46195E+02
0.360	0.27340E+02
0.369	0.17911E+02
0.375	0.13257E+02
0.380	0.10177E+02
0.384	0.80272E+01
0.387	0.64617E+01
0.396	0.43184E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 128

0 MEASURED :

• PREDICTED

SUM OF (ABS(LOG(P<sub>SIM</sub>)-LOG(P<sub>SIP</sub>))) = 0.30274E+01

SOIL HORIZON NUMBER 129 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.58 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.101	0.150E+05
0.118	0.600E+04
0.149	0.200E+04
0.167	0.100E+04
0.179	0.330E+03
0.210	0.100E+03
0.262	0.600E+02
0.337	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

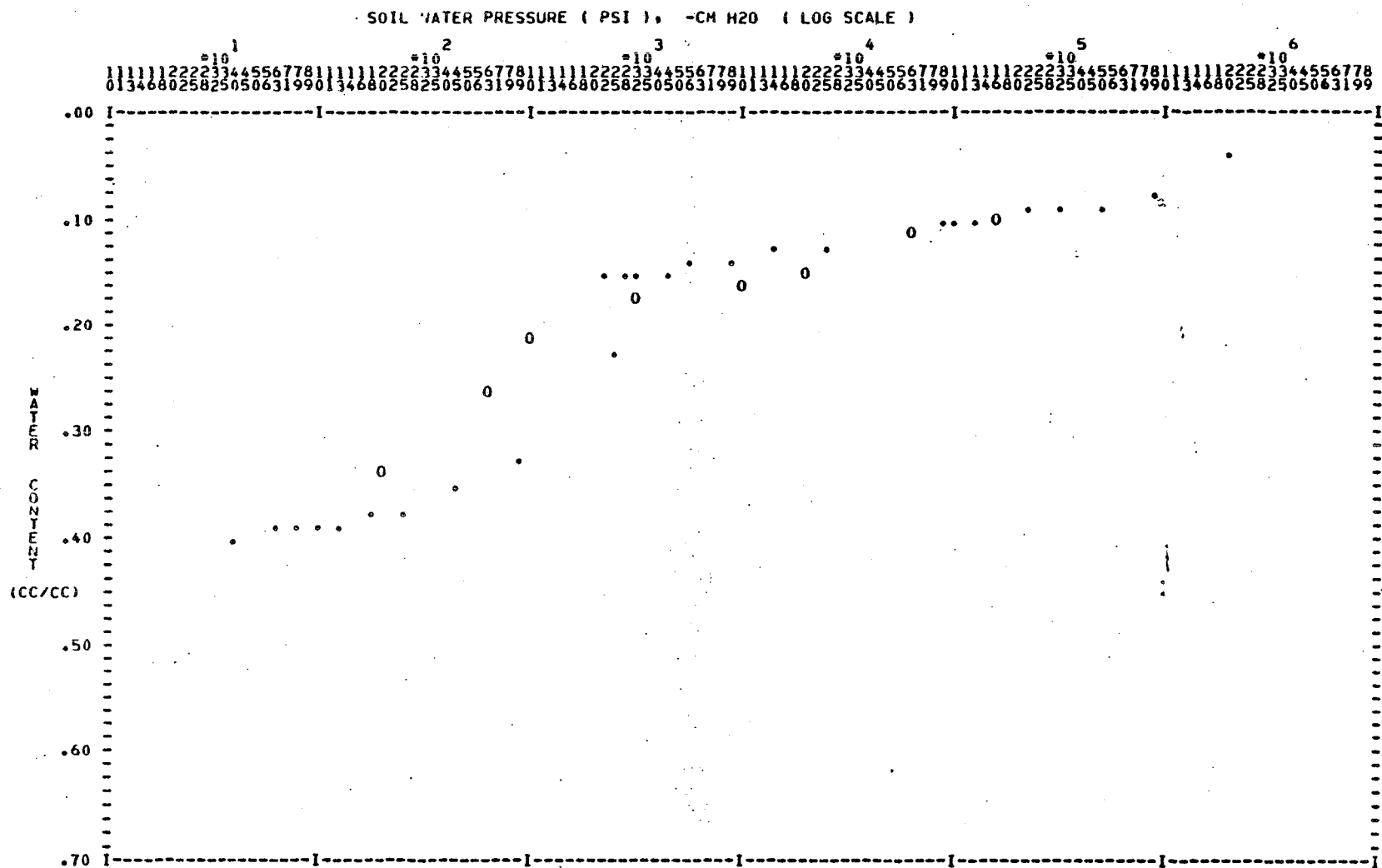
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	15.3	0.153
2.00	18.1	0.028
3.00	19.8	0.017
4.00	21.1	0.013
5.00	22.1	0.010
6.00	23.0	0.009
7.00	23.8	0.008
8.00	24.4	0.007
9.00	25.0	0.006
10.00	25.6	0.005
20.00	29.3	0.037
30.00	31.6	0.023
40.00	33.3	0.017
50.00	34.6	0.013
60.00	35.5	0.009
70.00	36.1	0.006
80.00	36.7	0.005
90.00	37.2	0.005
100.00	37.8	0.006
200.00	73.1	0.353
300.00	85.9	0.127
400.00	90.6	0.047
500.00	92.9	0.023
600.00	94.2	0.013
700.00	95.3	0.011
800.00	96.2	0.009
900.00	96.9	0.007
1000.00	97.4	0.005
2000.00	100.0	0.026

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.037	0.21041E+06
0.077	0.85829E+05
0.083	0.47907E+05
0.087	0.30988E+05
0.091	0.21881E+05
0.094	0.16376E+05
0.097	0.12775E+05
0.100	0.10280E+05
0.102	0.84745E+04
0.111	0.59716E+04
0.123	0.24473E+04
0.131	0.13566E+04
0.137	0.87020E+03
0.142	0.59285E+03
0.145	0.42568E+03
0.147	0.33076E+03
0.149	0.27187E+03
0.151	0.23145E+03
0.224	0.24635E+03
0.321	0.90962E+02
0.356	0.44422E+02
0.370	0.26175E+02
0.378	0.17154E+02
0.383	0.12721E+02
0.387	0.97492E+01
0.390	0.76537E+01
0.392	0.61117E+01
0.399	0.40384E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 130 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.55 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.081	0.150E+05
0.090	0.600E+04
0.110	0.200E+04
0.124	0.100E+04
0.139	0.330E+03
0.160	0.100E+03
0.256	0.600E+02
0.361	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	12.6	0.126
2.00	13.5	0.009
3.00	14.1	0.006
4.00	14.5	0.005
5.00	14.9	0.004
6.00	15.2	0.003
7.00	15.5	0.003
8.00	15.7	0.002
9.00	15.9	0.002
10.00	16.1	0.002
20.00	17.4	0.013
30.00	18.2	0.008
40.00	18.9	0.007
50.00	19.4	0.005
60.00	20.0	0.006
70.00	20.7	0.007
80.00	21.6	0.009
90.00	22.5	0.009
100.00	23.5	0.010
200.00	70.5	0.470
300.00	86.9	0.158
400.00	91.6	0.053
500.00	94.1	0.025
600.00	95.5	0.014
700.00	96.6	0.011
800.00	97.5	0.009
900.00	98.1	0.006
1000.00	98.5	0.004
2000.00	100.0	0.015

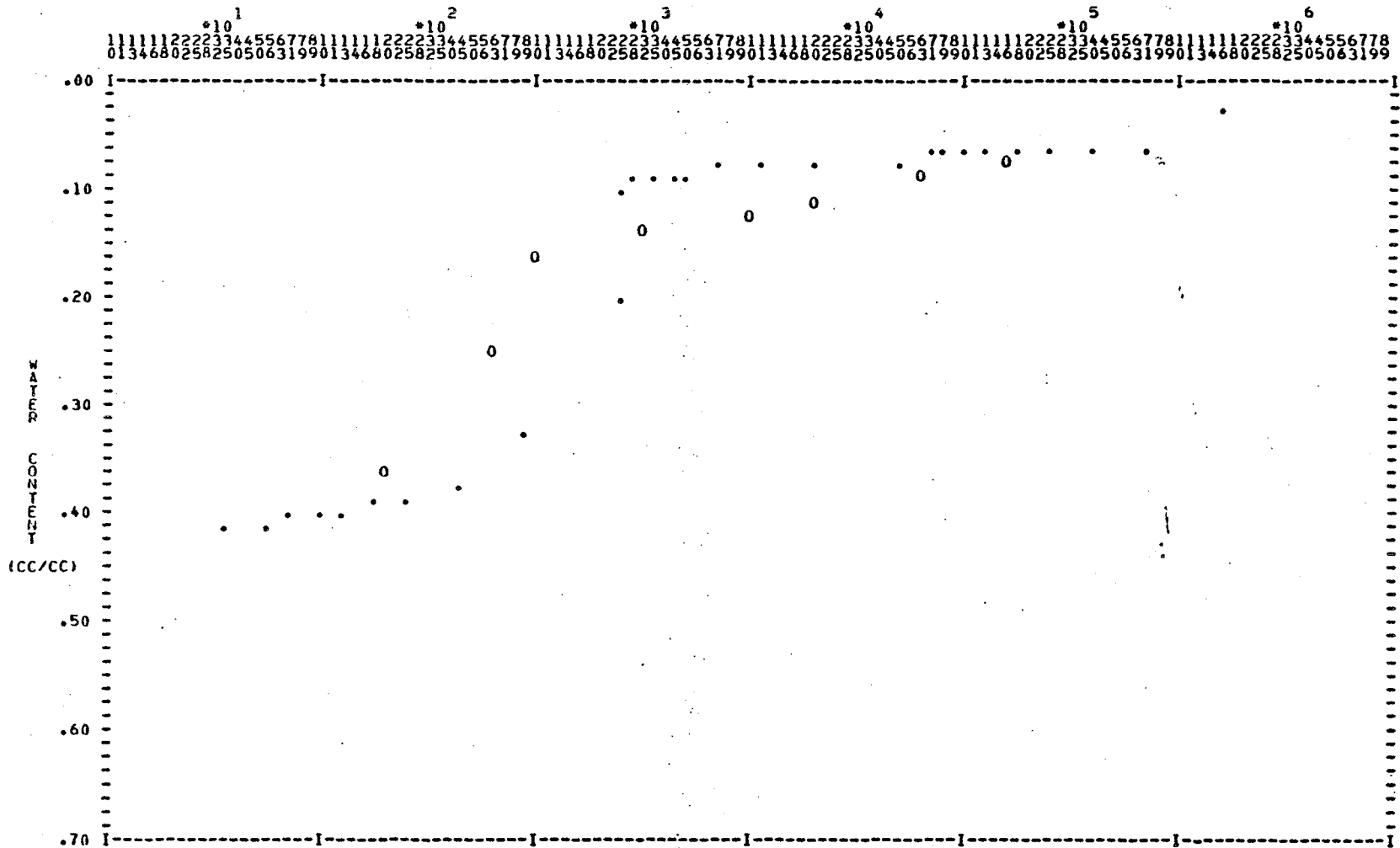
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE (-CM H2O )

0.028	0.16573E+06
0.057	0.68099E+05
0.059	0.38341E+05
0.061	0.24885E+05
0.062	0.17593E+05
0.064	0.13169E+05
0.065	0.10268E+05
0.066	0.82560E+04
0.067	0.67988E+04
0.070	0.47591E+04
0.074	0.19698E+04
0.077	0.11083E+04
0.079	0.71080E+03
0.082	0.52889E+03
0.084	0.42891E+03
0.088	0.35261E+03
0.091	0.29484E+03
0.095	0.25042E+03
0.195	0.25406E+03
0.325	0.92564E+02
0.369	0.44420E+02
0.385	0.25898E+02
0.393	0.16881E+02
0.399	0.12537E+02
0.403	0.95245E+01
0.406	0.73319E+01
0.408	0.56384E+01
0.412	0.35535E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 130

O MEASURED ;

. PREDICTED

SUM OF (ABS(LOG(P<sub>SIM</sub>)-LOG(P<sub>IP</sub>))) = 0.55149E+01

SOIL HORIZON NUMBER 131 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.19 G/CM\*\*3  
 PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.048	0.150E+05
0.059	0.600E+04
0.077	0.200E+04
0.174	0.100E+04
0.196	0.330E+03
0.207	0.100E+03
0.363	0.600E+02
0.400	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	4.1	0.041
2.00	6.2	0.021
3.00	7.6	0.014
4.00	8.9	0.013
5.00	10.0	0.011
6.00	11.0	0.010
7.00	12.0	0.010
8.00	12.9	0.009
9.00	13.7	0.008
10.00	14.5	0.008
20.00	20.6	0.061
30.00	25.6	0.050
40.00	29.6	0.040
50.00	32.5	0.029
60.00	33.9	0.014
70.00	34.6	0.007
80.00	35.4	0.008
90.00	36.6	0.012
100.00	38.3	0.017
200.00	57.7	0.194
300.00	70.5	0.128
400.00	80.0	0.095
500.00	86.9	0.069
600.00	91.6	0.047
700.00	94.6	0.030
800.00	96.6	0.019
900.00	97.8	0.012
1000.00	98.4	0.006
2000.00	100.0	0.016

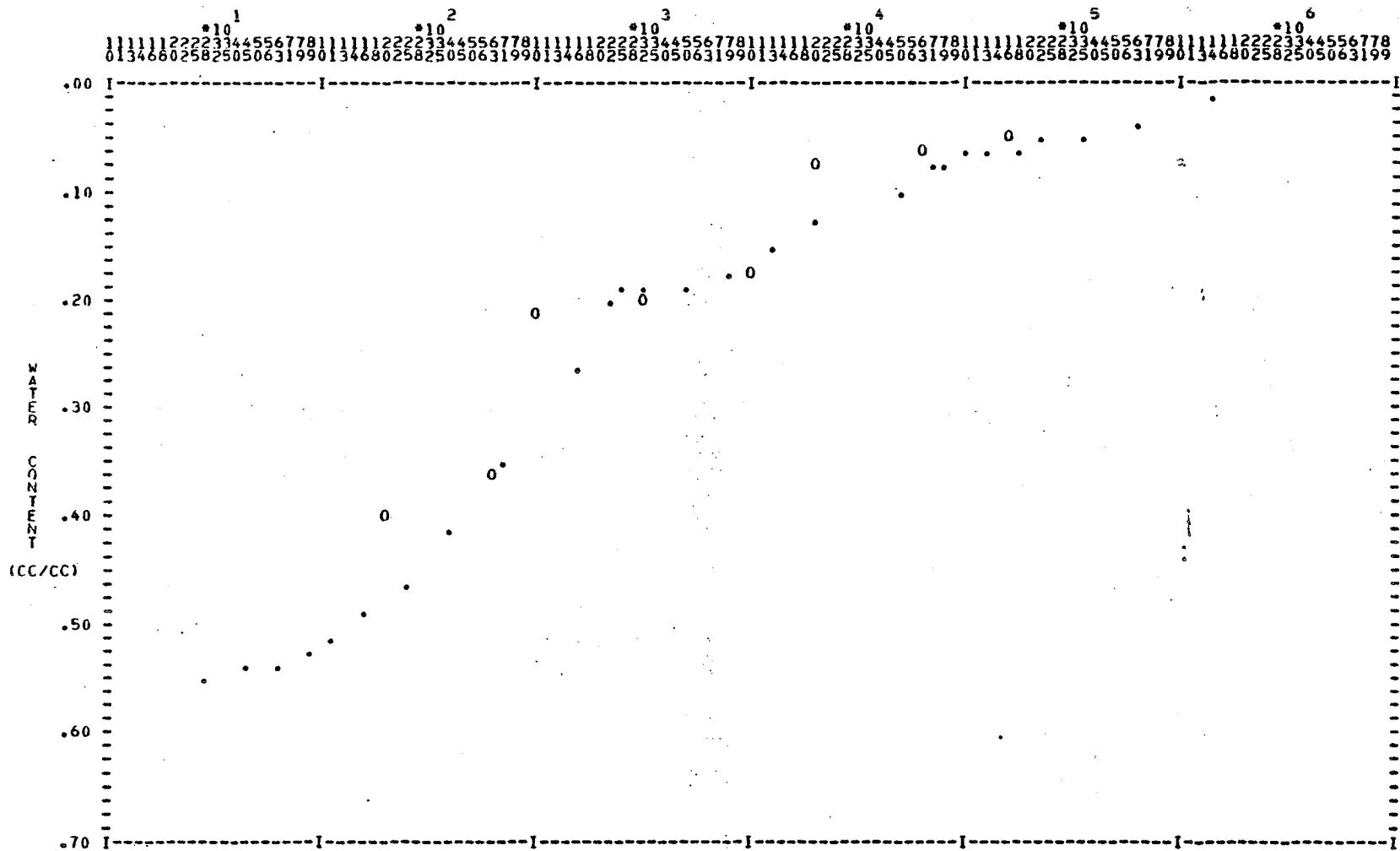
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.017	0.14758E+06
0.038	0.61494E+05
0.045	0.35442E+05
0.052	0.23413E+05
0.058	0.16789E+05
0.063	0.12718E+05
0.069	0.10019E+05
0.073	0.81296E+04
0.078	0.67497E+04
0.097	0.48725E+04
0.127	0.21044E+04
0.152	0.11891E+04
0.171	0.75203E+03
0.183	0.48163E+03
0.189	0.32008E+03
0.193	0.26156E+03
0.198	0.23428E+03
0.206	0.21175E+03
0.264	0.16329E+03
0.353	0.67680E+02
0.415	0.37683E+02
0.460	0.23928E+02
0.492	0.16230E+02
0.513	0.11487E+02
0.527	0.84236E+01
0.535	0.62969E+01
0.540	0.47028E+01
0.547	0.27359E+01

ALPHA = 1.38



SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 131

0 MEASURED : . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.22319E+01

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SOIL HORIZON NUMBER 132 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.36 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.041	0.150E+05
0.054	0.600E+04
0.082	0.200E+04
0.175	0.100E+04
0.201	0.330E+03
0.227	0.100E+03
0.291	0.600E+02
0.392	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

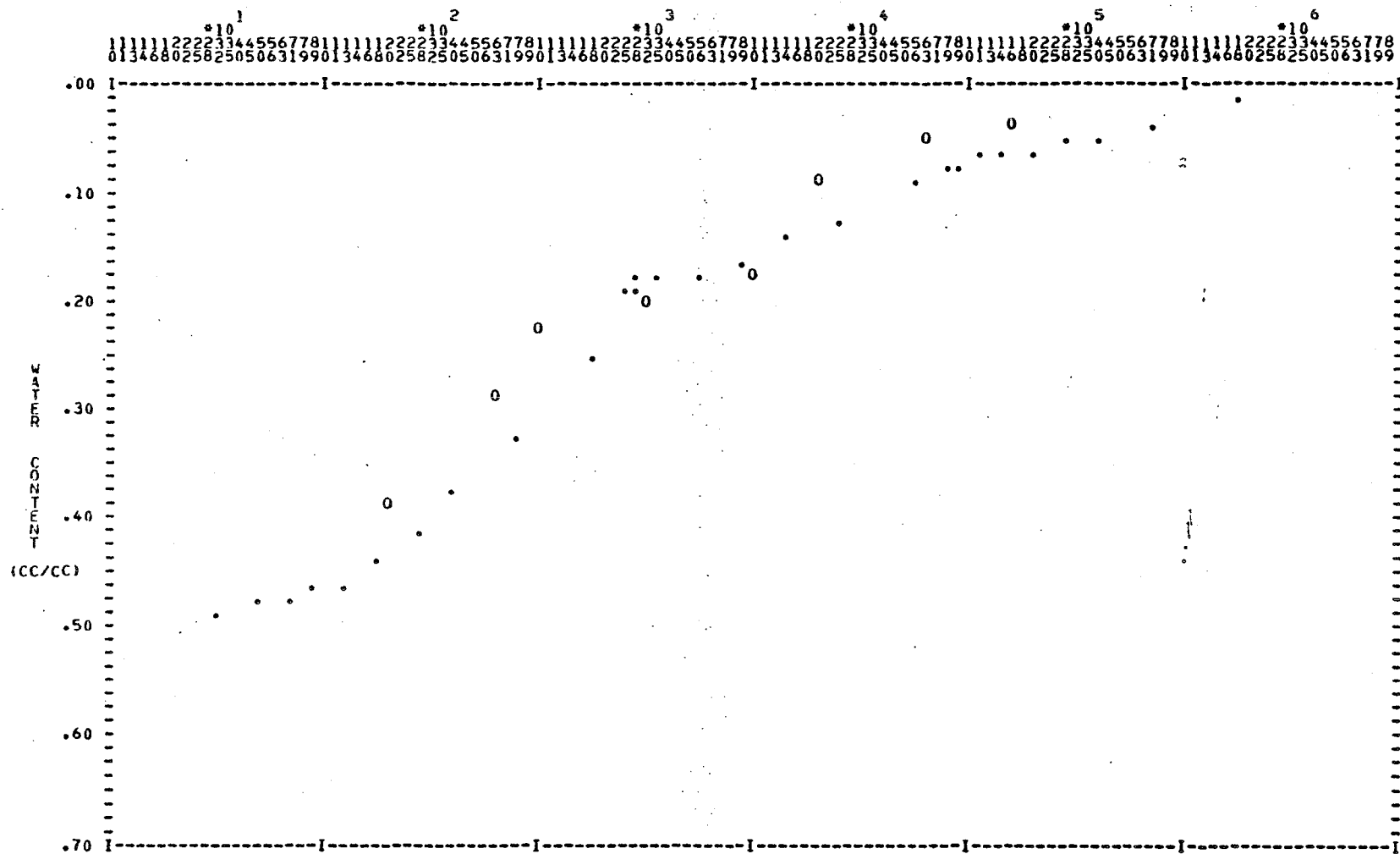
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	4.6	0.046
2.00	7.0	0.024
3.00	8.6	0.016
4.00	9.9	0.014
5.00	11.1	0.012
6.00	12.2	0.011
7.00	13.3	0.010
8.00	14.2	0.009
9.00	15.1	0.009
10.00	15.6	0.008
20.00	22.3	0.064
30.00	27.4	0.051
40.00	31.3	0.040
50.00	34.2	0.029
60.00	35.5	0.013
70.00	36.0	0.005
80.00	36.8	0.008
90.00	38.2	0.014
100.00	40.4	0.022
200.00	60.4	0.200
300.00	72.5	0.121
400.00	81.2	0.087
500.00	87.8	0.066
600.00	92.4	0.046
700.00	95.2	0.028
800.00	96.9	0.017
900.00	97.9	0.010
1000.00	98.5	0.006
2000.00	100.0	0.015

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.017	0.17175E+06
0.038	0.71318E+05
0.045	0.40933E+05
0.051	0.26984E+05
0.057	0.19325E+05
0.062	0.14627E+05
0.067	0.11516E+05
0.071	0.93403E+04
0.075	0.77523E+04
0.093	0.55914E+04
0.121	0.23970E+04
0.143	0.13495E+04
0.159	0.85550E+03
0.170	0.59393E+03
0.174	0.34634E+03
0.177	0.29741E+03
0.183	0.27513E+03
0.191	0.25155E+03
0.245	0.18684E+03
0.324	0.76171E+02
0.374	0.42128E+02
0.411	0.26969E+02
0.439	0.18357E+02
0.457	0.12868E+02
0.468	0.93694E+01
0.474	0.69783E+01
0.478	0.52324E+01
0.483	0.30737E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 132

O MEASURED

. PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.31328E+01

SOIL HORIZON NUMBER 133 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.48 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.198	0.150E+05
0.065	0.600E+04
0.098	0.200E+04
0.157	0.100E+04
0.182	0.330E+03
0.225	0.100E+03
0.277	0.600E+02
0.367	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	6.8	0.068
2.00	9.4	0.026
3.00	11.1	0.017
4.00	12.6	0.015
5.00	14.0	0.013
6.00	15.2	0.012
7.00	16.3	0.011
8.00	17.3	0.010
9.00	18.2	0.009
10.00	19.1	0.009
20.00	25.7	0.066
30.00	30.9	0.052
40.00	35.1	0.041
50.00	38.0	0.029
60.00	39.4	0.014
70.00	40.0	0.006
80.00	40.7	0.007
90.00	41.9	0.012
100.00	43.8	0.016
200.00	62.3	0.185
300.00	74.0	0.117
400.00	82.5	0.085
500.00	88.8	0.063
600.00	93.1	0.043
700.00	95.7	0.027
800.00	97.4	0.016
900.00	98.3	0.009
1000.00	98.8	0.005
2000.00	100.0	0.012

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.021	0.19152E+06
0.042	0.79600E+05
0.053	0.45677E+05
0.059	0.30073E+05
0.064	0.21507E+05
0.069	0.16255E+05
0.074	0.12785E+05
0.078	0.10355E+05
0.082	0.85851E+04
0.099	0.61663E+04
0.123	0.28429E+04
0.146	0.14891E+04
0.161	0.94127E+03
0.175	0.59744E+03
0.188	0.38804E+03
0.202	0.32205E+03
0.216	0.29356E+03
0.234	0.26741E+03
0.253	0.20162E+03
0.280	0.82833E+02
0.308	0.45992E+02
0.337	0.29248E+02
0.400	0.19865E+02
0.417	0.13943E+02
0.436	0.10146E+02
0.439	0.79259E+01
0.439	0.55703E+01
0.439	0.32271E+01

ALPHA = 1.38



SOIL HORIZON NUMBER 134 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.48 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.092	0.150E+05
0.105	0.600E+04
0.130	0.200E+04
0.198	0.100E+04
0.221	0.330E+03
0.243	0.100E+03
0.283	0.600E+02
0.363	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

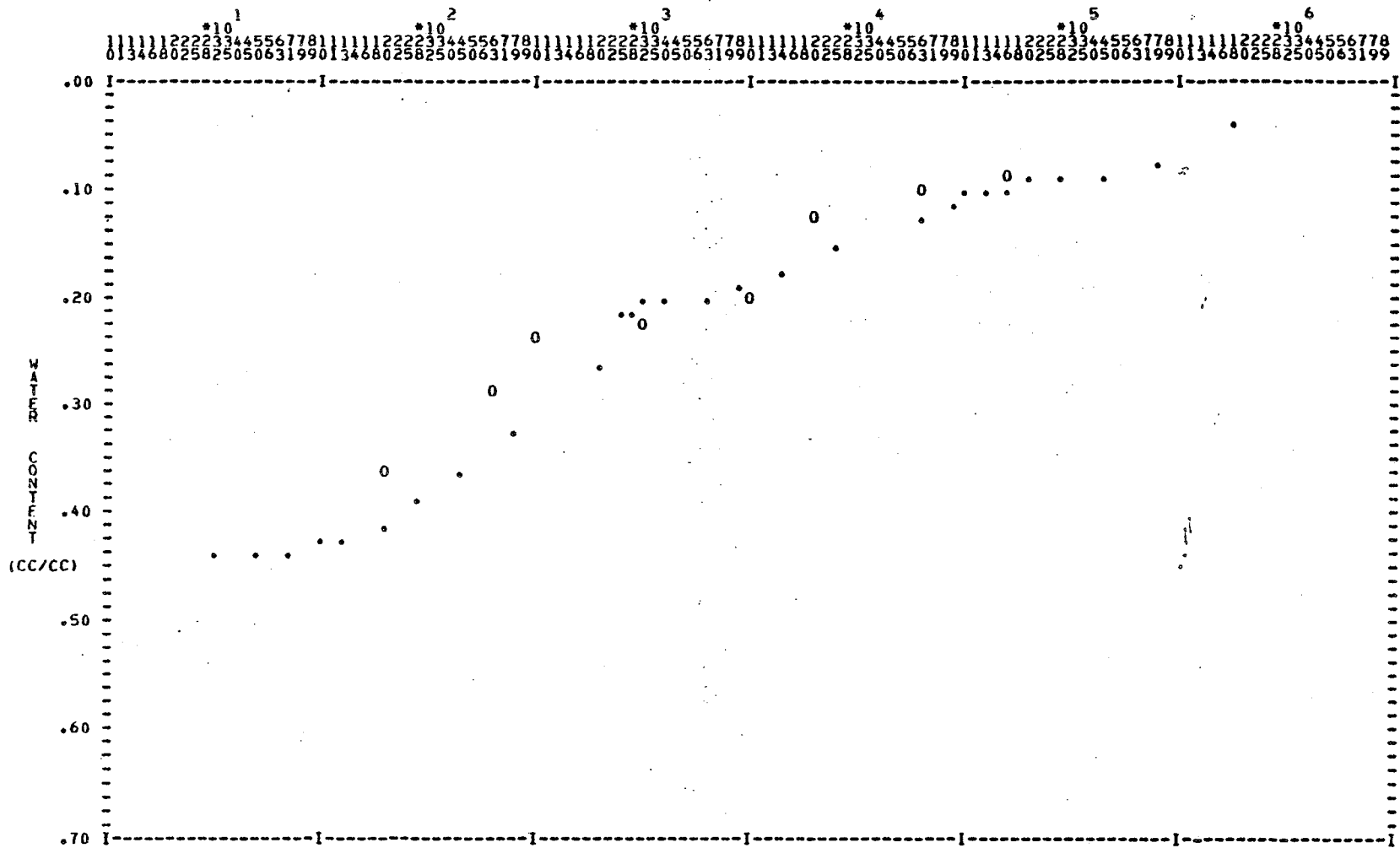
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	14.4	0.144
2.00	16.5	0.021
3.00	17.9	0.014
4.00	19.2	0.013
5.00	20.4	0.012
6.00	21.5	0.011
7.00	22.4	0.010
8.00	23.4	0.009
9.00	24.2	0.009
10.00	25.0	0.008
20.00	31.3	0.063
30.00	36.5	0.052
40.00	40.7	0.042
50.00	43.7	0.030
60.00	45.2	0.015
70.00	45.9	0.007
80.00	46.6	0.008
90.00	47.8	0.012
100.00	49.6	0.018
200.00	68.4	0.188
300.00	79.2	0.108
400.00	86.4	0.072
500.00	91.5	0.051
600.00	94.9	0.034
700.00	96.9	0.020
800.00	98.1	0.012
900.00	98.8	0.007
1000.00	99.1	0.003
2000.00	100.0	0.009

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.036	0.18448E+06
0.076	0.76927E+05
0.082	0.44373E+05
0.088	0.29322E+05
0.092	0.21025E+05
0.097	0.15930E+05
0.101	0.12550E+05
0.105	0.10183E+05
0.109	0.84546E+04
0.124	0.61022E+04
0.150	0.26423E+04
0.171	0.14942E+04
0.186	0.94311E+03
0.196	0.60286E+03
0.201	0.40017E+03
0.204	0.32654E+03
0.209	0.29235E+03
0.215	0.26452E+03
0.260	0.20217E+03
0.326	0.81649E+02
0.365	0.44554E+02
0.393	0.28147E+02
0.411	0.18966E+02
0.423	0.13235E+02
0.430	0.95782E+01
0.435	0.70682E+01
0.437	0.52089E+01
0.440	0.30554E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 134

0 MEASURED :

. PREDICTED

SUM OF (ABS(LOG(PSIN)-LOG(PSIP))) = 0.23143E+01

SOIL HORIZON NUMBER 135 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.54 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.057	0.150E+05
0.068	0.600E+04
0.082	0.200E+04
0.142	0.100E+04
0.157	0.330E+03
0.189	0.100E+03
0.237	0.600E+02
0.337	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	8.2	0.082
2.00	9.1	0.009
3.00	9.7	0.006
4.00	10.2	0.005
5.00	10.7	0.005
6.00	11.2	0.005
7.00	11.7	0.005
8.00	12.2	0.005
9.00	12.7	0.005
10.00	13.1	0.005
20.00	17.6	0.045
30.00	21.5	0.039
40.00	24.6	0.031
50.00	26.9	0.023
60.00	28.1	0.012
70.00	28.7	0.006
80.00	29.5	0.008
90.00	30.9	0.014
100.00	32.9	0.020
200.00	56.1	0.232
300.00	70.6	0.145
400.00	80.9	0.103
500.00	88.6	0.077
600.00	93.6	0.050
700.00	96.2	0.027
800.00	97.7	0.014
900.00	98.4	0.007
1000.00	98.8	0.004
2000.00	100.0	0.012

PREDICTED MOISTURE CHARACTERISTIC DATA

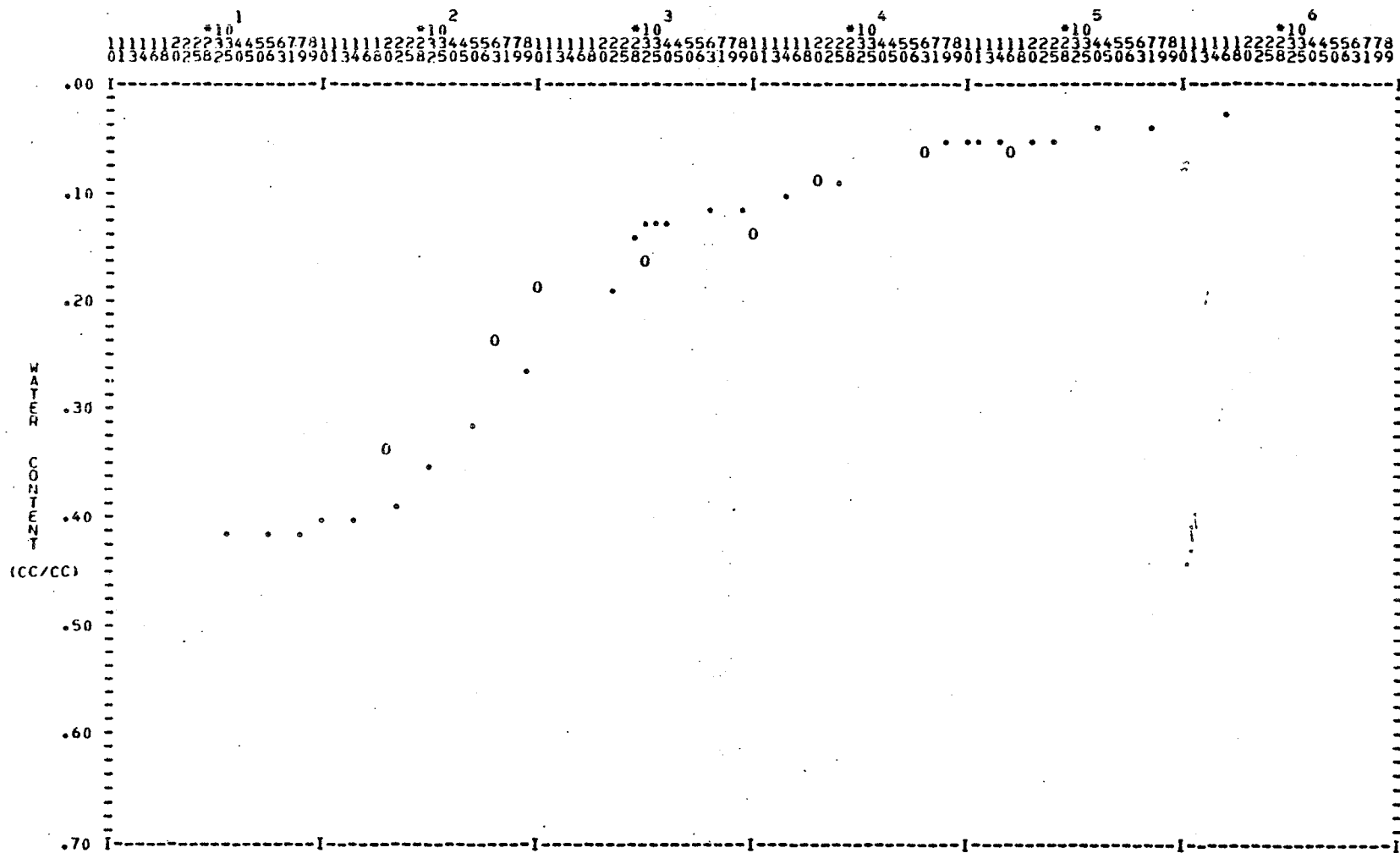
SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.019	0.16548E+06
0.039	0.67810E+05
0.042	0.39028E+05
0.044	0.26166E+05
0.046	0.19065E+05
0.048	0.14650E+05
0.050	0.11685E+05
0.052	0.95829E+04
0.054	0.80302E+04
0.064	0.59846E+04
0.082	0.26183E+04
0.097	0.14761E+04
0.108	0.94101E+03
0.115	0.60332E+03
0.119	0.40795E+03
0.123	0.34752E+03
0.126	0.31457E+03
0.134	0.28434E+03
0.186	0.22038E+03
0.265	0.90466E+02
0.317	0.49997E+02
0.355	0.31872E+02
0.383	0.21402E+02
0.398	0.14615E+02
0.406	0.10362E+02
0.411	0.75318E+01
0.413	0.55805E+01
0.416	0.33796E+01

ALPHA = 1.38

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SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 135

0 MEASURED   . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.21158E+01

SOIL HORIZON NUMBER 136 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.53 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.017	0.150E+05
0.018	0.600E+04
0.021	0.200E+04
0.024	0.100E+04
0.034	0.330E+03
0.046	0.100E+03
0.063	0.600E+02
0.231	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

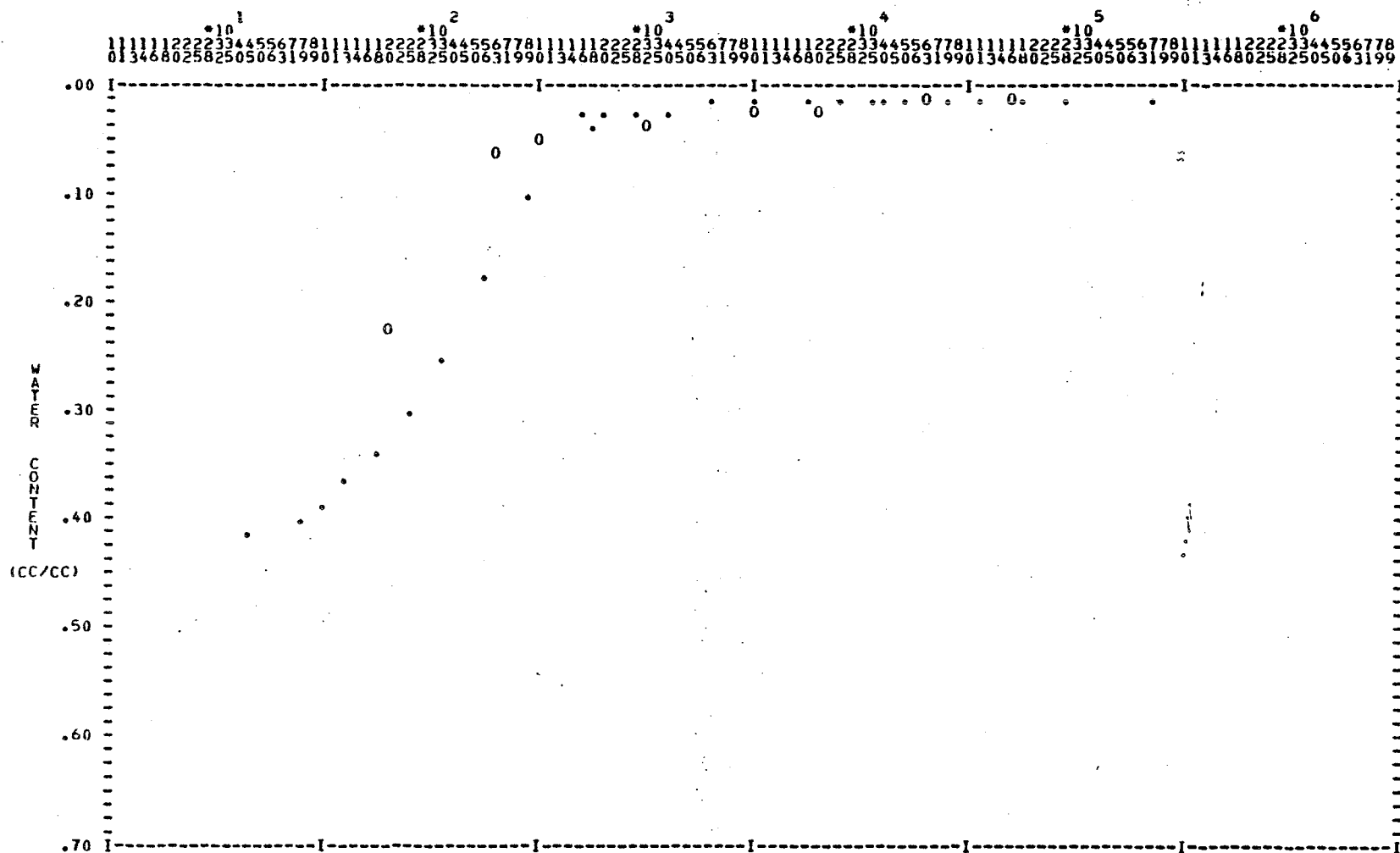
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	3.0	0.030
2.00	3.0	0.000
3.00	3.0	0.000
4.00	3.0	0.000
5.00	3.0	0.000
6.00	3.0	0.000
7.00	3.0	0.000
8.00	3.0	0.000
9.00	3.0	0.000
10.00	3.0	0.000
20.00	3.1	0.001
30.00	3.5	0.004
40.00	4.0	0.005
50.00	4.4	0.004
60.00	4.6	0.002
70.00	4.6	0.001
80.00	4.7	0.000
90.00	4.7	0.000
100.00	4.8	0.001
200.00	14.2	0.094
300.00	31.2	0.170
400.00	52.9	0.217
500.00	67.5	0.146
600.00	76.7	0.092
700.00	83.9	0.072
800.00	89.2	0.053
900.00	92.8	0.036
1000.00	94.9	0.021
2000.00	100.0	0.051

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.006	0.68689E+05
0.013	0.28727E+05
0.013	0.16851E+05
0.013	0.11325E+05
0.013	0.82379E+04
0.013	0.63126E+04
0.013	0.50210E+04
0.013	0.41069E+04
0.013	0.34333E+04
0.013	0.25368E+04
0.014	0.16959E+04
0.016	0.10452E+04
0.018	0.65742E+03
0.019	0.41616E+03
0.020	0.26737E+03
0.020	0.19393E+03
0.020	0.15500E+03
0.020	0.14931E+03
0.040	0.18428E+03
0.096	0.92438E+02
0.178	0.55710E+02
0.254	0.35664E+02
0.305	0.23884E+02
0.339	0.17529E+02
0.366	0.13209E+02
0.389	0.10079E+02
0.397	0.76428E+01
0.412	0.44147E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



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SOIL HORIZON NUMBER 137 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.53 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.060	0.150E+05
0.083	0.600E+04
0.099	0.200E+04
0.118	0.100E+04
0.167	0.330E+03
0.223	0.100E+03
0.277	0.600E+02
0.355	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	9.2	0.092
2.00	9.8	0.006
3.00	10.3	0.005
4.00	10.8	0.005
5.00	11.3	0.005
6.00	11.8	0.004
7.00	12.2	0.004
8.00	12.5	0.003
9.00	12.8	0.003
10.00	13.1	0.003
20.00	14.9	0.018
30.00	15.4	0.005
40.00	17.0	0.016
50.00	20.3	0.033
60.00	26.5	0.062
70.00	34.4	0.079
80.00	42.0	0.077
90.00	48.6	0.066
100.00	53.8	0.052
200.00	86.8	0.330
300.00	92.4	0.056
400.00	93.7	0.013
500.00	94.8	0.011
600.00	95.8	0.010
700.00	96.6	0.008
800.00	97.3	0.007
900.00	97.9	0.006
1000.00	98.4	0.005
2000.00	100.0	0.016

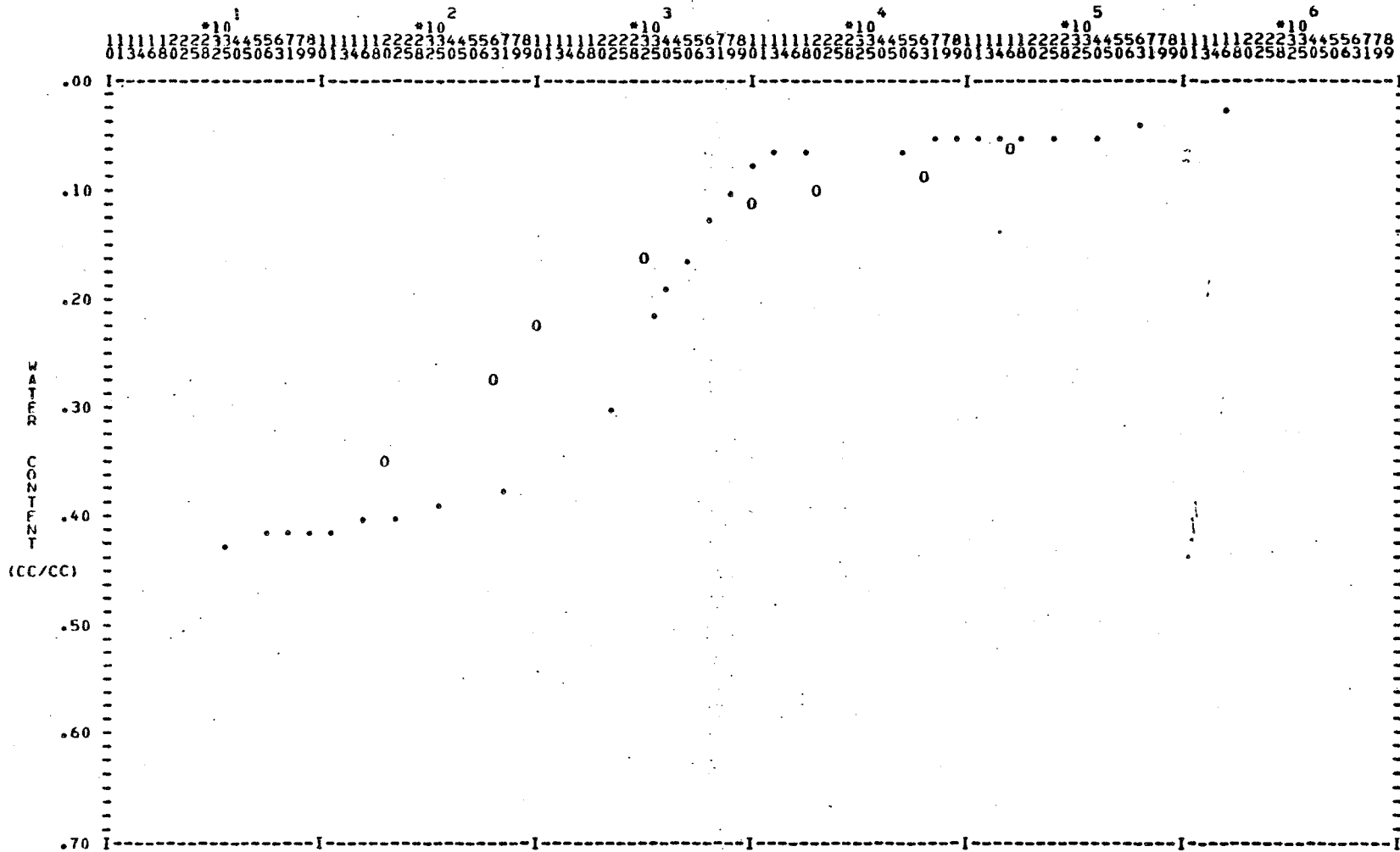
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.021	0.15018E+06
0.043	0.65594E+05
0.045	0.39006E+05
0.047	0.25853E+05
0.049	0.18464E+05
0.051	0.13894E+05
0.052	0.10862E+05
0.054	0.87430E+04
0.055	0.71999E+04
0.059	0.49973E+04
0.064	0.17746E+04
0.069	0.12920E+04
0.079	0.99835E+03
0.099	0.82137E+03
0.129	0.66288E+03
0.162	0.52620E+03
0.192	0.41993E+03
0.216	0.33696E+03
0.297	0.23390E+03
0.379	0.74876E+02
0.393	0.33566E+02
0.398	0.21667E+02
0.403	0.15519E+02
0.406	0.11586E+02
0.410	0.89885E+01
0.412	0.71799E+01
0.415	0.58674E+01
0.419	0.35420E+01

ALPHA = 1.38

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SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 137

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.38982E+01

SOIL HORIZON NUMBER 138 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.57 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.121	0.150E+05
0.141	0.600E+04
0.159	0.200E+04
0.174	0.100E+04
0.240	0.330E+03
0.261	0.100E+03
0.276	0.600E+02
0.317	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

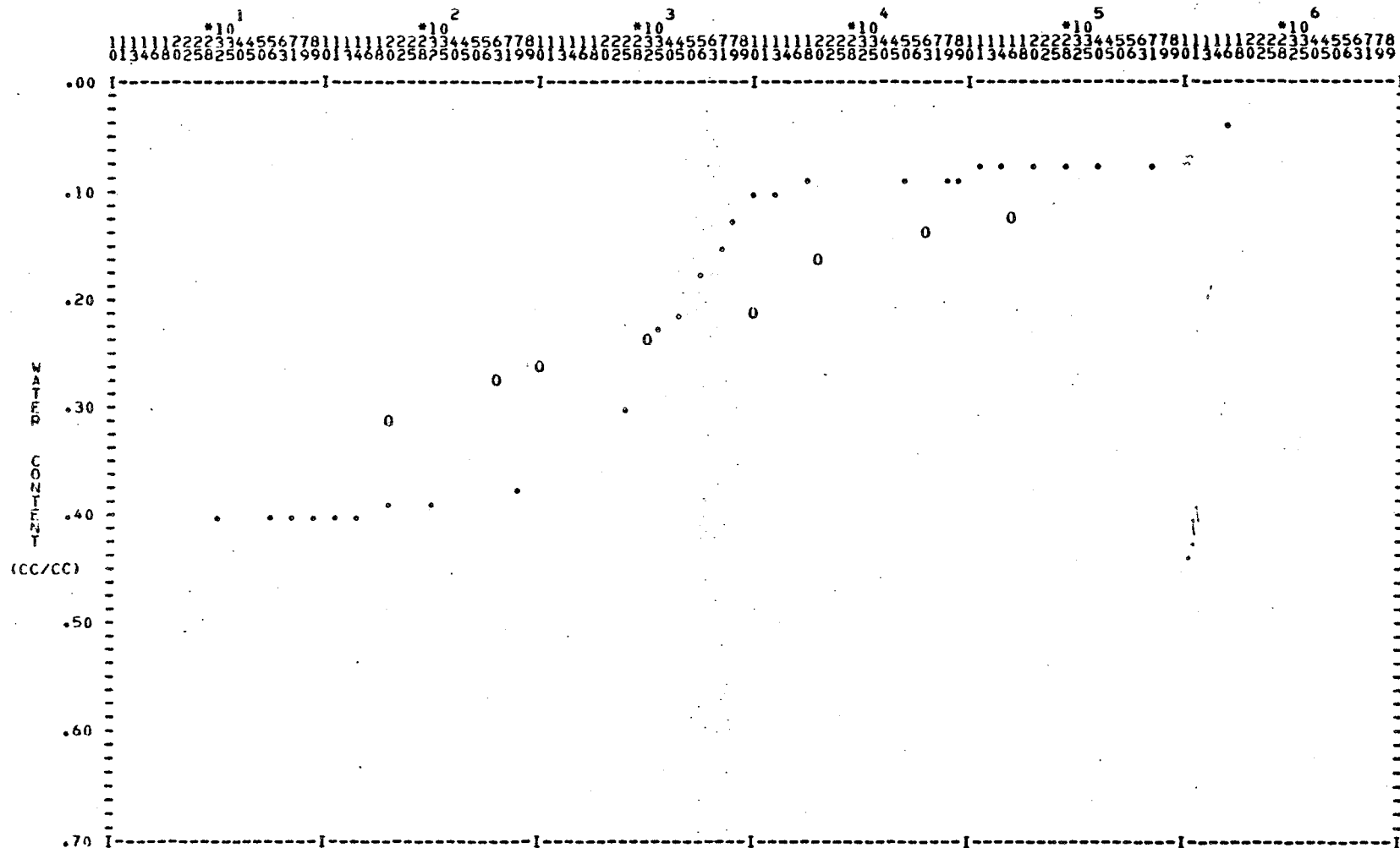
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	16.2	0.162
2.00	17.0	0.008
3.00	17.5	0.006
4.00	18.2	0.006
5.00	18.8	0.005
6.00	19.2	0.005
7.00	19.7	0.004
8.00	20.0	0.004
9.00	20.4	0.003
10.00	20.7	0.003
20.00	22.6	0.019
30.00	23.1	0.005
40.00	24.5	0.014
50.00	27.4	0.029
60.00	33.0	0.056
70.00	40.4	0.074
80.00	47.6	0.072
90.00	53.8	0.062
100.00	58.7	0.049
200.00	90.2	0.315
300.00	95.3	0.051
400.00	96.0	0.007
500.00	96.6	0.006
600.00	97.2	0.006
700.00	97.8	0.006
800.00	98.3	0.005
900.00	98.7	0.004
1000.00	99.0	0.003
2000.00	100.0	0.010

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.035	0.16410E+06
0.071	0.70271E+06
0.073	0.41186E+06
0.075	0.27168E+06
0.077	0.19355E+06
0.079	0.14542E+06
0.081	0.11360E+06
0.082	0.91392E+05
0.084	0.75241E+05
0.088	0.52244E+05
0.093	0.18334E+05
0.097	0.12973E+05
0.106	0.10054E+05
0.123	0.83332E+04
0.150	0.67480E+04
0.179	0.53627E+04
0.207	0.42825E+04
0.229	0.34380E+04
0.303	0.23913E+04
0.378	0.75813E+03
0.390	0.30871E+03
0.392	0.20088E+03
0.395	0.14857E+03
0.397	0.11113E+03
0.400	0.86024E+02
0.401	0.68364E+02
0.403	0.55440E+02
0.406	0.33417E+02

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 138

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.51822E+01

SOIL HORIZON NUMBER 139 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.42 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.062	0.150E+05
0.078	0.600E+04
0.095	0.200E+04
0.182	0.100E+04
0.204	0.330E+03
0.244	0.100E+03
0.263	0.600E+02
0.345	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	7.3	0.073
2.00	10.4	0.027
3.00	11.8	0.018
4.00	13.3	0.015
5.00	14.7	0.013
6.00	15.9	0.012
7.00	16.9	0.011
8.00	17.9	0.010
9.00	18.8	0.009
10.00	19.7	0.008
20.00	26.0	0.063
30.00	31.0	0.050
40.00	34.9	0.038
50.00	37.3	0.024
60.00	38.8	0.015
70.00	39.8	0.011
80.00	40.7	0.009
90.00	41.6	0.008
100.00	42.4	0.008
200.00	49.4	0.070
300.00	54.8	0.054
400.00	60.4	0.056
500.00	65.6	0.052
600.00	70.7	0.051
700.00	75.8	0.050
800.00	80.3	0.045
900.00	84.0	0.037
1000.00	87.0	0.030
2000.00	100.0	0.130

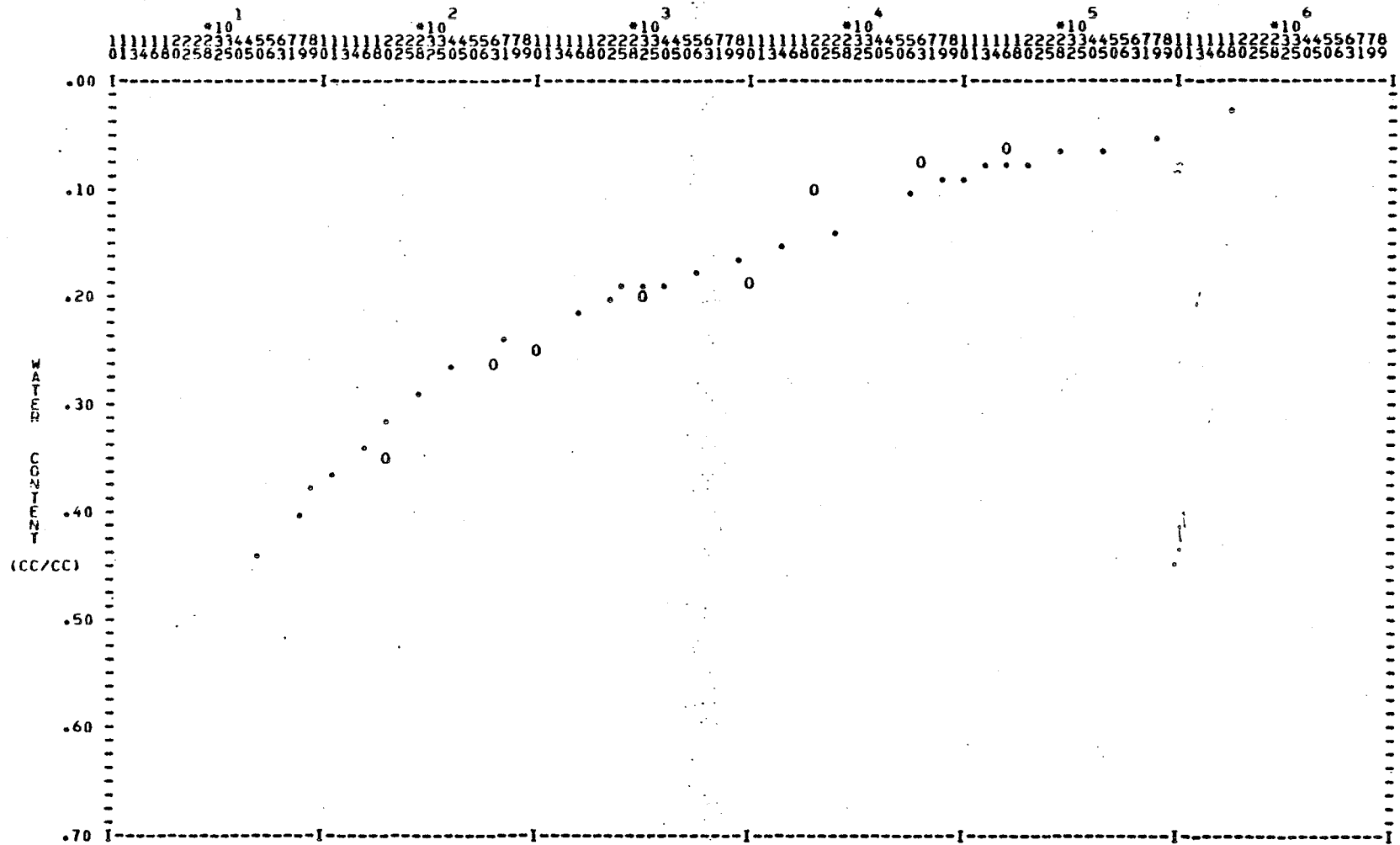
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.023	0.18460E+06
0.051	0.76587E+05
0.058	0.43808E+05
0.065	0.28772E+05
0.071	0.20536E+05
0.076	0.15497E+05
0.081	0.12169E+05
0.085	0.98463E+04
0.089	0.81549E+04
0.106	0.58347E+04
0.132	0.25054E+04
0.153	0.14025E+04
0.167	0.86835E+03
0.177	0.57630E+03
0.182	0.41577E+03
0.187	0.32101E+03
0.191	0.26064E+03
0.195	0.21915E+03
0.213	0.16014E+03
0.243	0.68337E+02
0.267	0.40621E+02
0.282	0.26948E+02
0.316	0.19638E+02
0.344	0.15055E+02
0.360	0.11753E+02
0.366	0.93355E+01
0.384	0.75140E+01
0.434	0.48481E+01

ALPHA = 1.38



SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 139

0 MEASURED :

0 PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.23576E+01

SOIL HORIZON NUMBER 140 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.34 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.048	0.150E+05
0.071	0.600E+04
0.094	0.200E+04
0.188	0.100E+04
0.209	0.330E+03
0.272	0.100E+03
0.299	0.600E+02
0.389	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

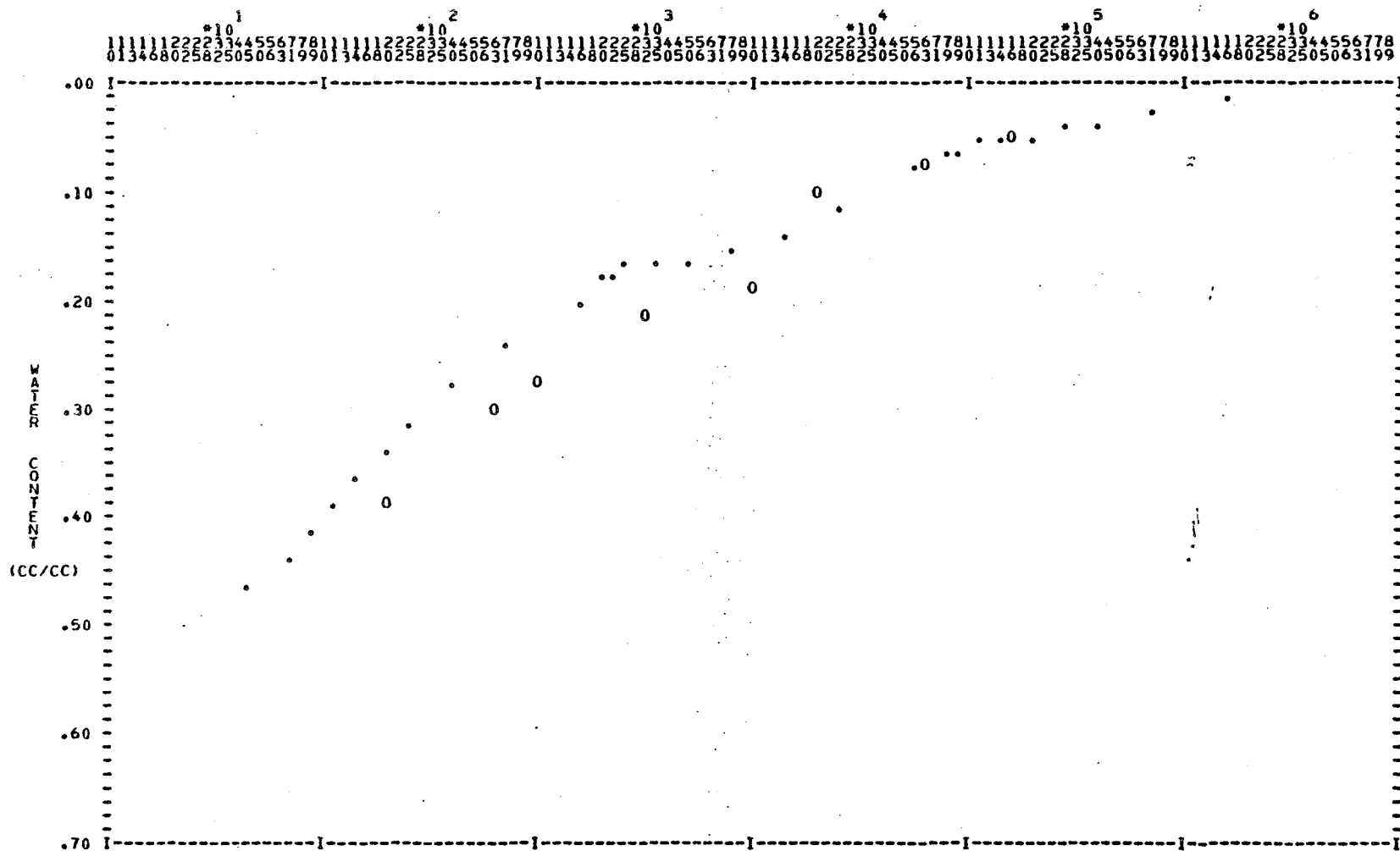
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	2.1	0.021
2.00	4.2	0.021
3.00	5.7	0.015
4.00	7.1	0.014
5.00	8.4	0.013
6.00	9.5	0.011
7.00	10.6	0.010
8.00	11.5	0.010
9.00	12.4	0.009
10.00	13.2	0.008
20.00	19.3	0.061
30.00	24.8	0.055
40.00	29.2	0.044
50.00	32.0	0.028
60.00	33.2	0.012
70.00	33.7	0.005
80.00	34.1	0.004
90.00	34.6	0.006
100.00	35.5	0.009
200.00	45.2	0.097
300.00	52.7	0.075
400.00	59.2	0.065
500.00	64.8	0.056
600.00	70.6	0.058
700.00	76.5	0.059
800.00	81.6	0.052
900.00	85.8	0.042
1000.00	89.0	0.032
2000.00	100.0	0.110

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.010	0.16625E+06
0.025	0.69862E+05
0.032	0.40506E+05
0.038	0.26755E+05
0.044	0.19153E+05
0.050	0.14476E+05
0.055	0.11378E+05
0.059	0.92104E+04
0.063	0.76301E+04
0.080	0.54561E+04
0.109	0.23962E+04
0.133	0.13585E+04
0.151	0.83766E+03
0.161	0.52394E+03
0.165	0.33610E+03
0.168	0.25653E+03
0.170	0.22730E+03
0.173	0.20717E+03
0.199	0.16023E+03
0.242	0.68517E+02
0.276	0.39292E+02
0.306	0.25774E+02
0.335	0.18913E+02
0.364	0.14585E+02
0.391	0.11371E+02
0.414	0.89792E+01
0.432	0.71486E+01
0.467	0.44209E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 141 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.64 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.057	0.150E+05
0.087	0.600E+04
0.138	0.200E+04
0.157	0.100E+04
0.187	0.330E+03
0.215	0.100E+03
0.231	0.600E+02
0.284	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	13.5	0.135
2.00	15.8	0.023
3.00	17.3	0.015
4.00	18.7	0.013
5.00	19.8	0.012
6.00	20.9	0.010
7.00	21.8	0.009
8.00	22.7	0.009
9.00	23.5	0.008
10.00	24.2	0.008
20.00	30.0	0.058
30.00	34.6	0.046
40.00	38.0	0.035
50.00	40.3	0.023
60.00	41.8	0.015
70.00	43.0	0.012
80.00	44.0	0.010
90.00	44.9	0.009
100.00	45.7	0.008
200.00	52.1	0.064
300.00	57.0	0.048
400.00	62.5	0.055
500.00	67.5	0.050
600.00	72.5	0.050
700.00	77.5	0.050
800.00	81.9	0.044
900.00	85.5	0.036
1000.00	88.4	0.029
2000.00	100.0	0.116

PREDICTED MOISTURE CHARACTERISTIC DATA

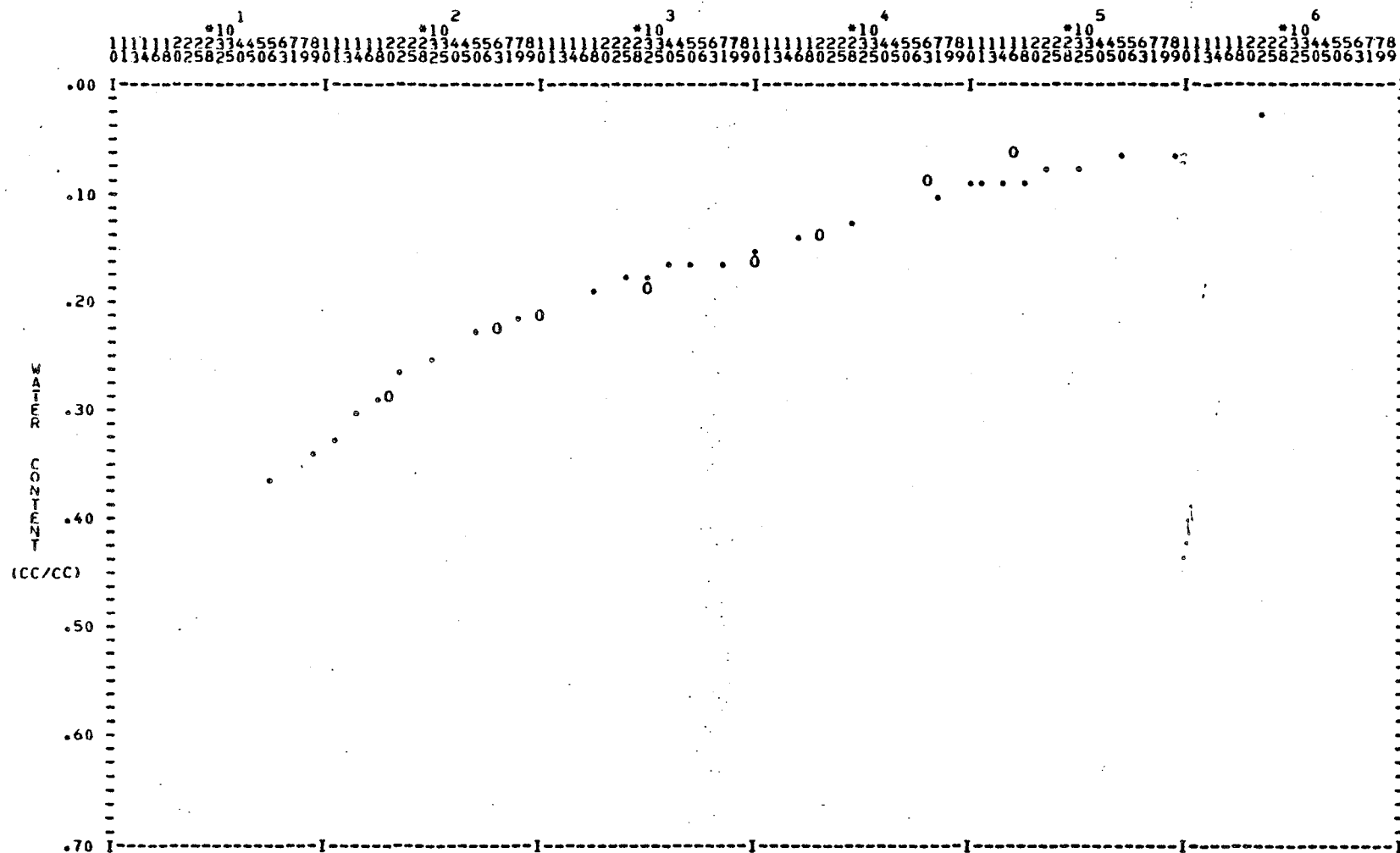
SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.030	0.21302E+06
0.063	0.88251E+05
0.069	0.50461E+05
0.073	0.33176E+05
0.078	0.23712E+05
0.081	0.17918E+05
0.085	0.14089E+05
0.088	0.11414E+05
0.091	0.94639E+04
0.094	0.68029E+04
0.097	0.29192E+04
0.101	0.16312E+04
0.104	0.10143E+04
0.106	0.68413E+03
0.109	0.50231E+03
0.112	0.38917E+03
0.115	0.31367E+03
0.118	0.26040E+03
0.121	0.18694E+03
0.124	0.79372E+02
0.127	0.47936E+02
0.130	0.31800E+02
0.133	0.23184E+02
0.136	0.17809E+02
0.139	0.13896E+02
0.142	0.11014E+02
0.145	0.88318E+01
0.148	0.56265E+01

ALPHA = 1.38

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SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 141

0 MEASURED :

. PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSP))) = 0.20136E+01

SOIL HORIZON NUMBER 142 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.56 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.217	0.150E+05
0.231	0.600E+04
0.264	0.200E+04
0.193	0.100E+04
0.215	0.330E+03
0.240	0.100E+03
0.262	0.600E+02
0.314	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	19.3	0.193
2.00	21.7	0.024
3.00	23.2	0.015
4.00	24.5	0.012
5.00	25.5	0.011
6.00	26.4	0.009
7.00	27.3	0.008
8.00	28.0	0.008
9.00	28.7	0.007
10.00	29.3	0.006
20.00	34.1	0.048
30.00	37.6	0.035
40.00	40.1	0.025
50.00	41.8	0.017
60.00	43.0	0.012
70.00	44.0	0.010
80.00	44.9	0.009
90.00	45.6	0.008
100.00	46.3	0.007
200.00	51.2	0.049
300.00	54.6	0.034
400.00	59.0	0.044
500.00	63.7	0.047
600.00	68.6	0.049
700.00	73.4	0.048
800.00	77.7	0.043
900.00	81.4	0.037
1000.00	84.4	0.030
2000.00	100.0	0.156

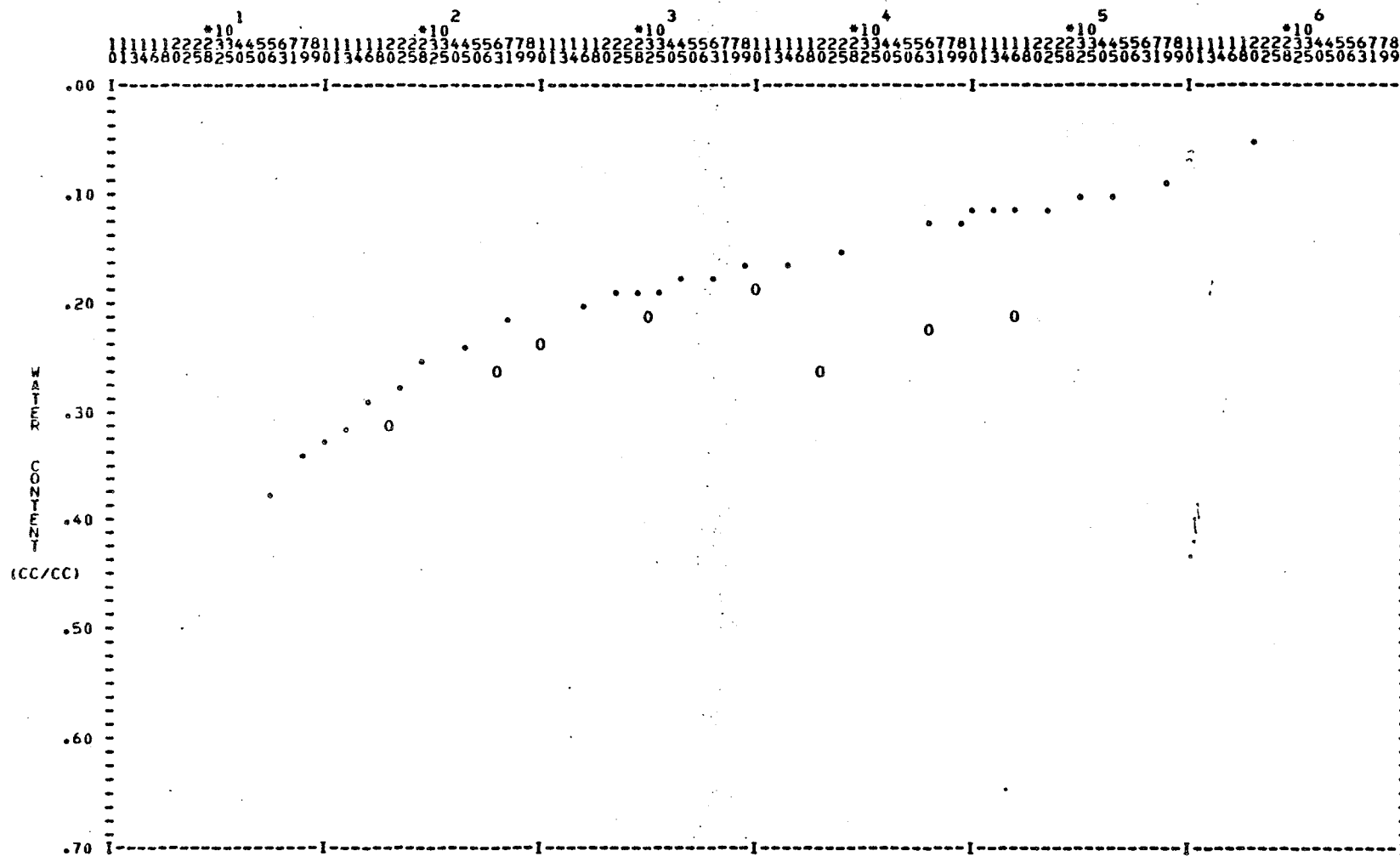
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.045	0.20070E+06
0.092	0.82613E+05
0.098	0.46799E+05
0.103	0.30590E+05
0.107	0.21775E+05
0.110	0.16404E+05
0.114	0.12867E+05
0.117	0.10403E+05
0.119	0.86119E+04
0.130	0.61573E+04
0.147	0.25992E+04
0.160	0.14436E+04
0.168	0.90262E+03
0.174	0.61728E+03
0.179	0.45722E+03
0.183	0.35480E+03
0.186	0.28498E+03
0.189	0.23505E+03
0.200	0.16630E+03
0.217	0.69803E+02
0.234	0.43213E+02
0.252	0.29452E+02
0.272	0.21668E+02
0.292	0.16608E+02
0.311	0.12990E+02
0.327	0.10355E+02
0.341	0.83793E+01
0.379	0.55882E+01

ALPHA = 1.38

B-284

SOIL WATER PRESSURE ( PSI ) : -CM H2O ( LOG SCALE )



B-285

SOIL HORIZON NUMBER 143 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.45 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.057	0.150E+05
0.067	0.600E+04
0.107	0.200E+04
0.162	0.100E+04
0.186	0.330E+03
0.226	0.100E+03
0.249	0.600E+02
0.339	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	5.0	0.050
2.00	8.0	0.030
3.00	10.0	0.020
4.00	11.6	0.017
5.00	13.2	0.015
6.00	14.5	0.014
7.00	15.8	0.013
8.00	17.0	0.012
9.00	18.1	0.011
10.00	19.2	0.011
20.00	27.7	0.085
30.00	34.6	0.069
40.00	39.8	0.052
50.00	43.3	0.035
60.00	45.7	0.024
70.00	47.7	0.020
80.00	49.4	0.017
90.00	50.9	0.015
100.00	52.4	0.015
200.00	62.8	0.104
300.00	69.8	0.070
400.00	75.3	0.055
500.00	79.7	0.044
600.00	83.5	0.038
700.00	86.0	0.034
800.00	88.8	0.029
900.00	92.3	0.025
1000.00	94.3	0.020
2000.00	100.0	0.057

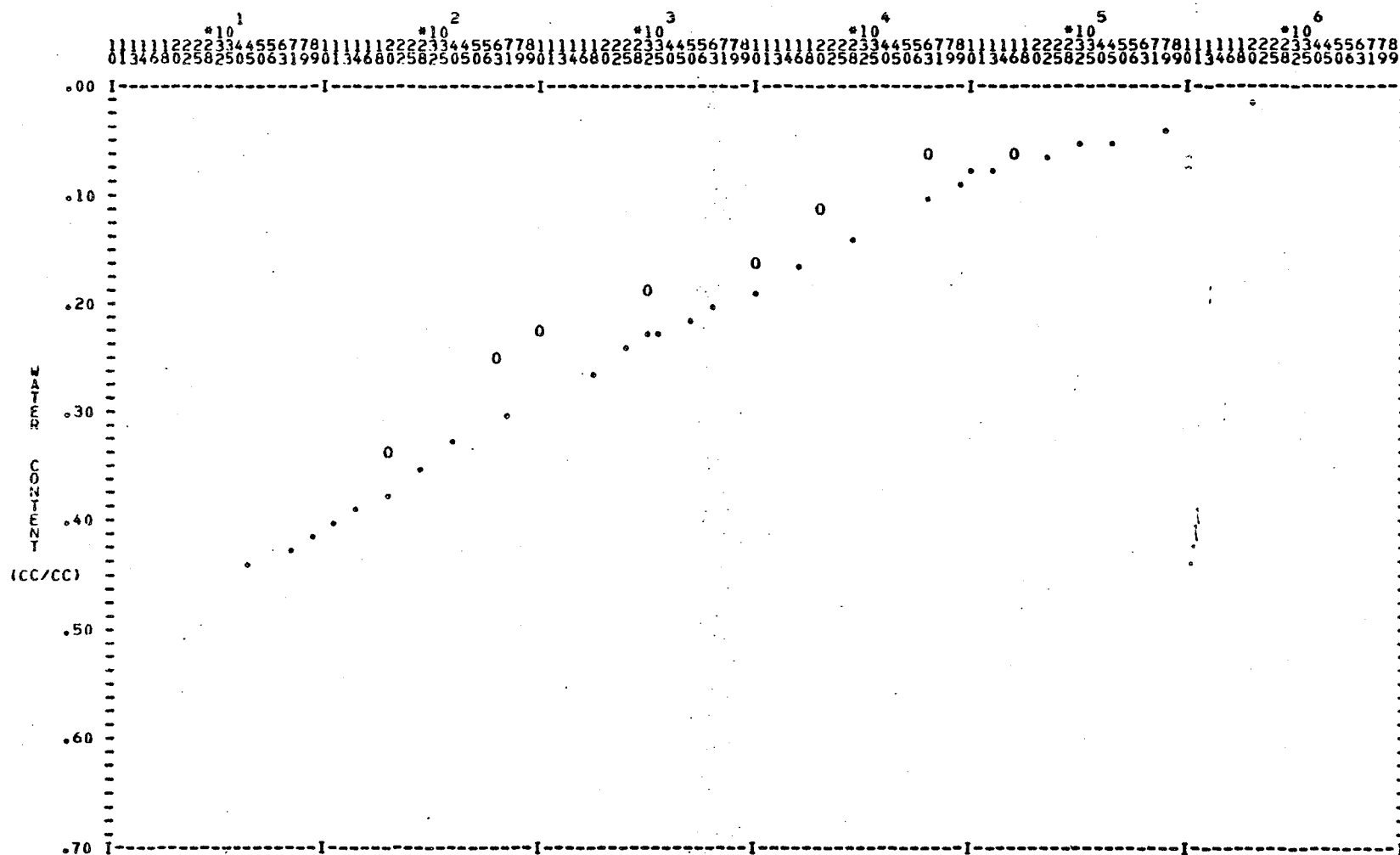
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.018	0.19225E+06
0.041	0.79609E+05
0.049	0.45626E+05
0.056	0.30107E+05
0.063	0.21595E+05
0.069	0.16371E+05
0.074	0.12910E+05
0.080	0.10486E+05
0.084	0.87145E+04
0.106	0.63180E+04
0.141	0.27203E+04
0.168	0.15215E+04
0.188	0.95165E+03
0.202	0.64759E+03
0.212	0.47807E+03
0.220	0.37166E+03
0.227	0.30005E+03
0.234	0.24918E+03
0.261	0.17655E+03
0.300	0.73487E+02
0.329	0.41428E+02
0.351	0.26706E+02
0.369	0.18946E+02
0.386	0.14277E+02
0.400	0.11090E+02
0.412	0.88236E+01
0.422	0.71522E+01
0.440	0.42407E+01

ALPHA = 1.38



# SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 144 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.50 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.076	0.150E+05
0.088	0.600E+04
0.124	0.200E+04
0.168	0.100E+04
0.196	0.330E+03
0.232	0.100E+03
0.249	0.600E+02
0.337	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	6.9	0.069
2.00	10.2	0.033
3.00	12.4	0.022
4.00	14.2	0.019
5.00	16.0	0.016
6.00	17.3	0.015
7.00	18.7	0.014
8.00	20.0	0.013
9.00	21.2	0.012
10.00	22.3	0.011
20.00	31.2	0.089
30.00	38.3	0.071
40.00	43.6	0.053
50.00	47.2	0.036
60.00	49.7	0.025
70.00	51.6	0.020
80.00	53.4	0.017
90.00	54.9	0.016
100.00	56.4	0.015
200.00	66.7	0.103
300.00	73.6	0.069
400.00	78.9	0.053
500.00	83.0	0.041
600.00	86.4	0.034
700.00	89.4	0.030
800.00	92.0	0.026
900.00	94.2	0.022
1000.00	96.1	0.019
2000.00	100.0	0.039

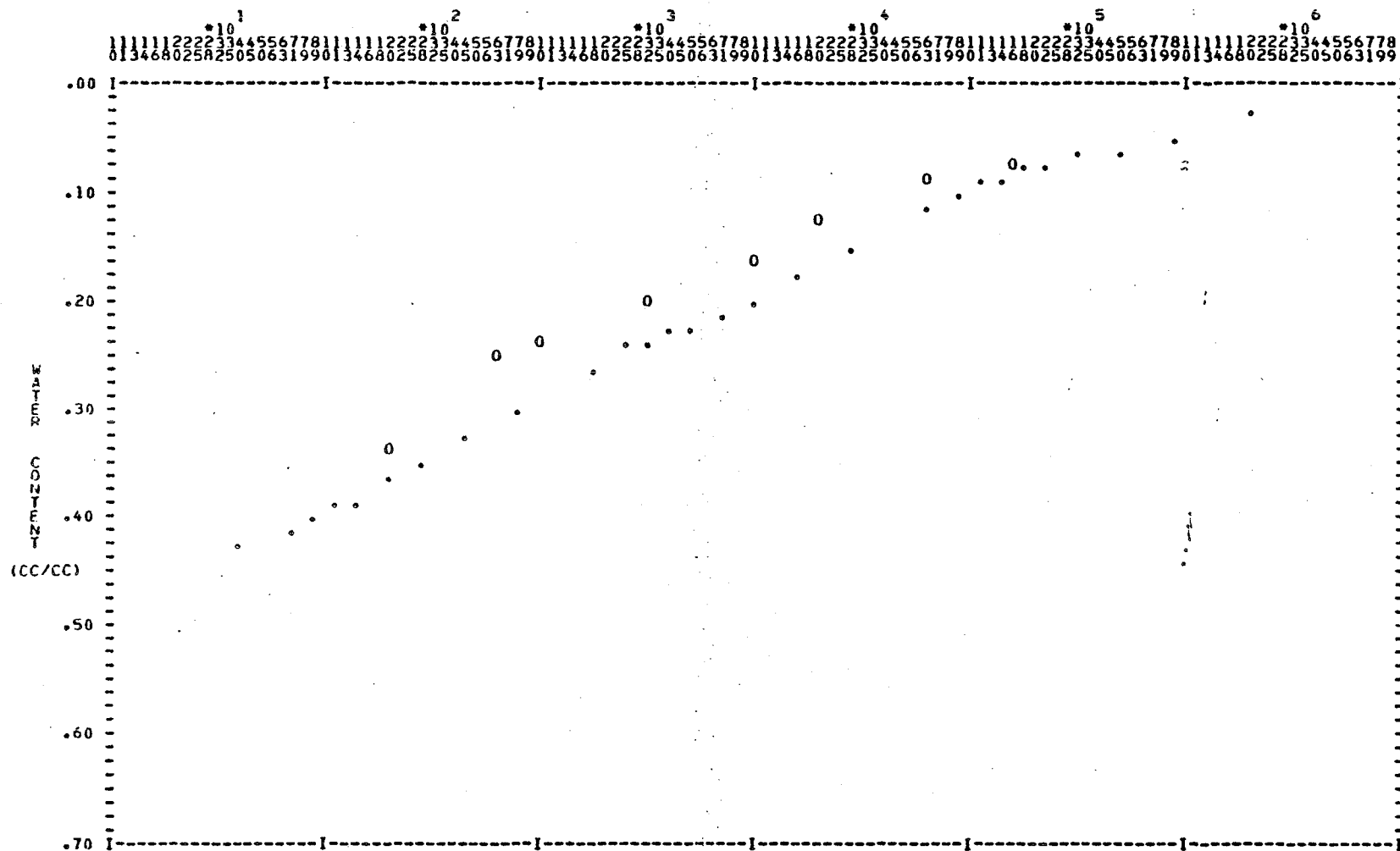
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.022	0.20367E+06
0.049	0.84312E+05
0.058	0.48253E+05
0.065	0.31791E+05
0.072	0.22772E+05
0.078	0.17242E+05
0.084	0.13583E+05
0.089	0.11022E+05
0.094	0.91533E+04
0.116	0.66176E+04
0.151	0.28425E+04
0.178	0.15883E+04
0.197	0.99182E+03
0.210	0.67413E+03
0.220	0.49772E+03
0.228	0.38697E+03
0.235	0.31242E+03
0.242	0.25945E+03
0.267	0.18312E+03
0.304	0.76223E+02
0.331	0.42620E+02
0.351	0.27410E+02
0.368	0.19341E+02
0.382	0.14490E+02
0.394	0.11249E+02
0.404	0.89742E+01
0.413	0.73143E+01
0.426	0.40995E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 145 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.56 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.128	0.150E+05
0.134	0.600E+04
0.159	0.200E+04
0.164	0.100E+04
0.183	0.330E+03
0.222	0.100E+03
0.242	0.600E+02
0.332	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

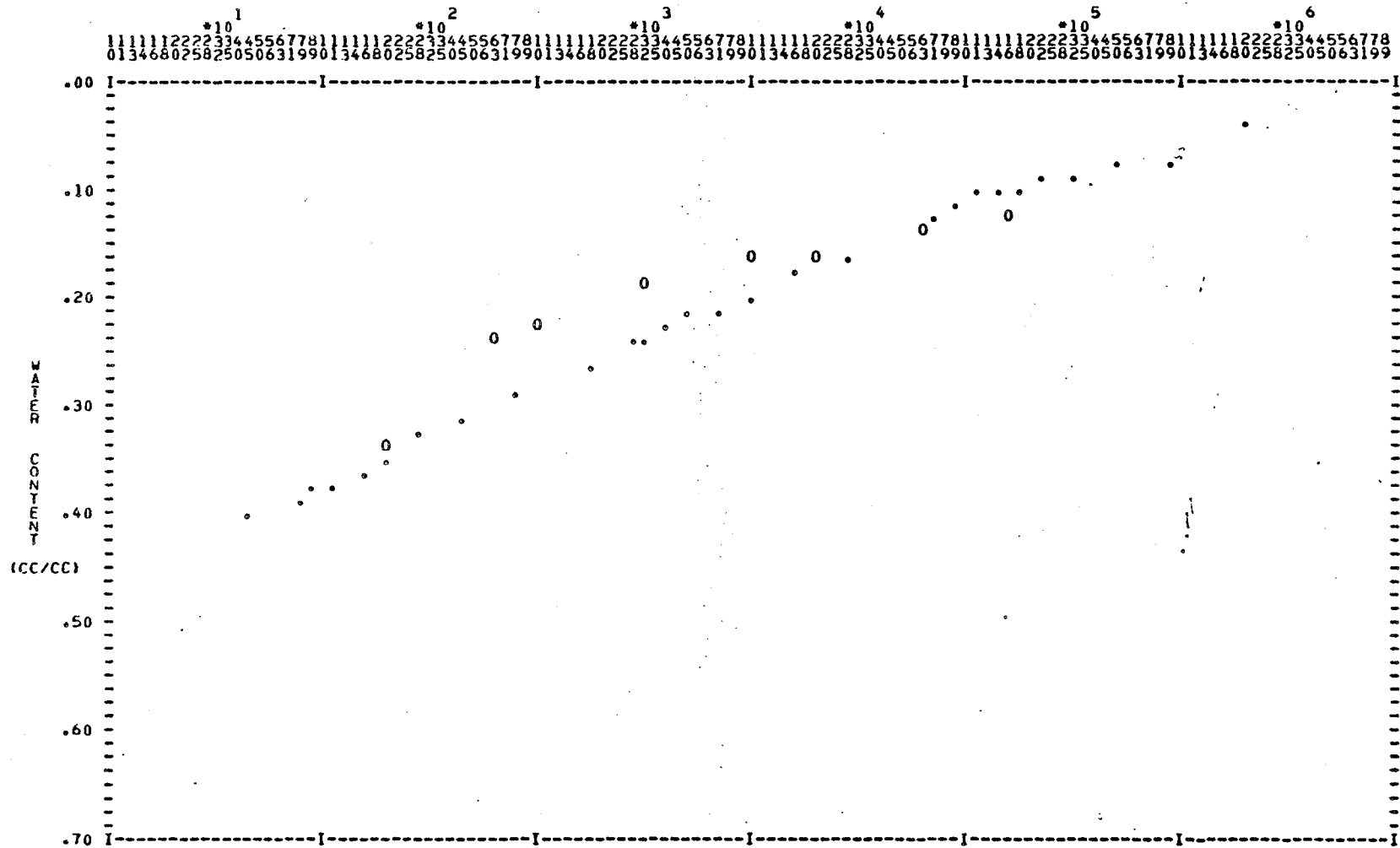
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	12.9	0.129
2.00	15.9	0.030
3.00	17.8	0.019
4.00	19.5	0.016
5.00	20.9	0.014
6.00	22.2	0.013
7.00	23.5	0.012
8.00	24.6	0.011
9.00	25.7	0.011
10.00	26.7	0.010
20.00	34.9	0.082
30.00	41.3	0.064
40.00	46.0	0.047
50.00	49.3	0.033
60.00	51.7	0.024
70.00	53.7	0.020
80.00	55.5	0.017
90.00	57.0	0.015
100.00	58.4	0.014
200.00	67.7	0.093
300.00	73.6	0.059
400.00	78.4	0.049
500.00	82.3	0.039
600.00	85.6	0.033
700.00	88.6	0.030
800.00	91.2	0.026
900.00	93.3	0.022
1000.00	95.1	0.018
2000.00	100.0	0.049

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.033	0.20959E+06
0.069	0.86469E+05
0.077	0.49353E+05
0.083	0.32515E+05
0.089	0.23309E+05
0.094	0.17667E+05
0.099	0.13932E+05
0.103	0.11317E+05
0.108	0.94075E+04
0.127	0.68280E+04
0.157	0.29197E+04
0.180	0.16266E+04
0.196	0.10214E+04
0.208	0.70294E+03
0.217	0.52301E+03
0.225	0.40654E+03
0.231	0.32646E+03
0.237	0.26885E+03
0.259	0.18819E+03
0.291	0.77298E+02
0.313	0.44008E+02
0.331	0.28383E+02
0.345	0.20105E+02
0.358	0.15164E+02
0.370	0.11778E+02
0.379	0.93650E+01
0.387	0.75824E+01
0.401	0.44845E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 145

O MEASURED ;

. PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.29804E+01

SOIL HORIZON NUMBER 146 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.19 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.063	0.150E+05
0.064	0.600E+04
0.100	0.200E+04
0.217	0.100E+04
0.245	0.330E+03
0.297	0.100E+03
0.333	0.600E+02
0.447	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

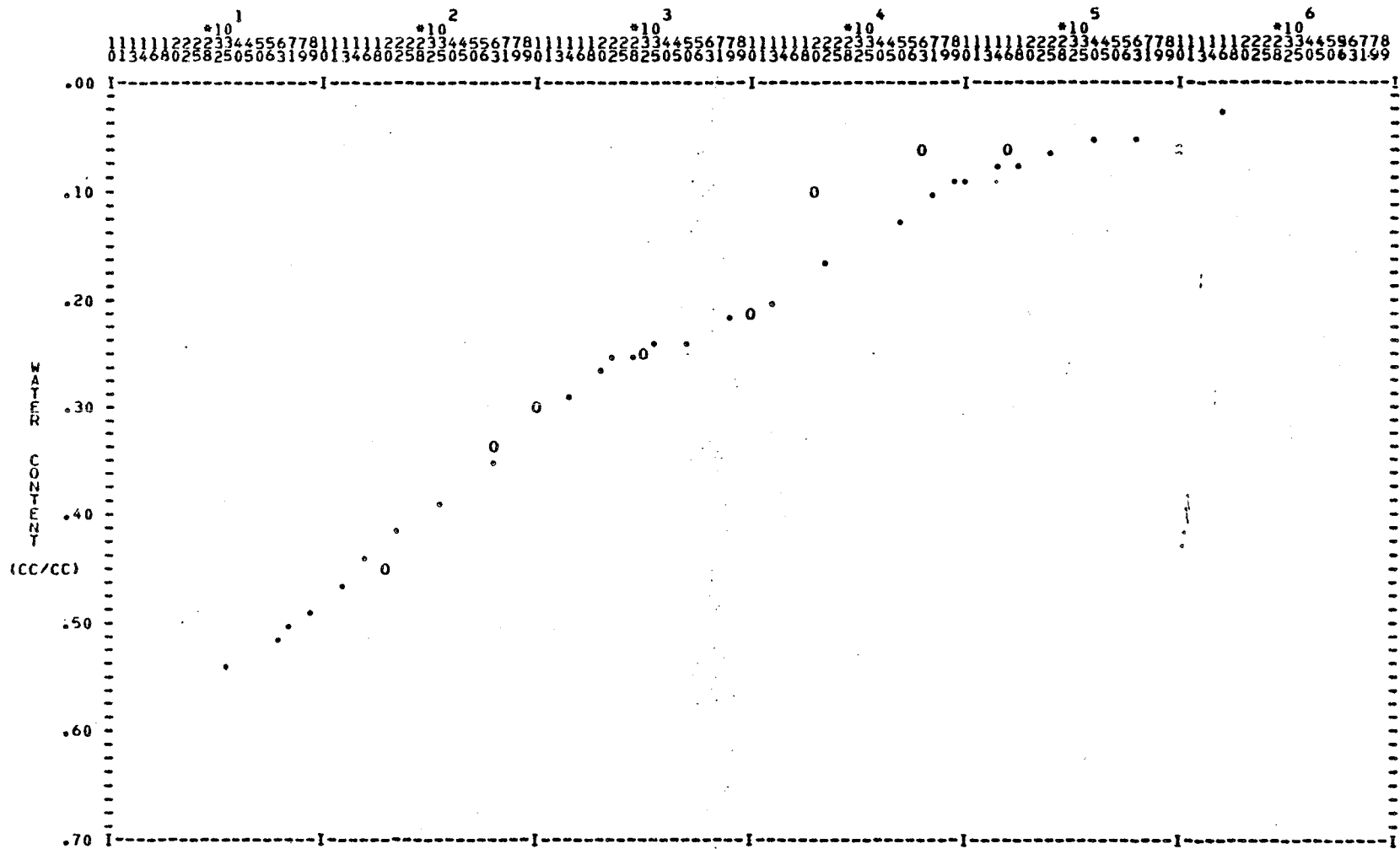
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	4.4	0.044
2.00	7.3	0.029
3.00	9.3	0.020
4.00	11.0	0.017
5.00	12.5	0.015
6.00	13.9	0.014
7.00	15.2	0.013
8.00	16.3	0.012
9.00	17.4	0.011
10.00	18.5	0.010
20.00	26.3	0.078
30.00	32.8	0.065
40.00	37.9	0.051
50.00	41.2	0.033
60.00	43.5	0.023
70.00	44.5	0.014
80.00	45.7	0.012
90.00	46.9	0.012
100.00	48.1	0.012
200.00	58.9	0.104
300.00	66.5	0.080
400.00	72.8	0.063
500.00	77.8	0.050
600.00	82.1	0.043
700.00	86.0	0.039
800.00	89.3	0.033
900.00	92.1	0.028
1000.00	94.4	0.023
2000.00	100.0	0.056

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.020	0.15709E+06
0.046	0.65412E+05
0.056	0.37623E+05
0.065	0.24805E+05
0.073	0.17753E+05
0.080	0.13430E+05
0.087	0.10567E+05
0.093	0.85643E+04
0.099	0.71034E+04
0.123	0.51108E+04
0.163	0.22115E+04
0.195	0.12434E+04
0.233	0.77232E+03
0.262	0.51104E+03
0.290	0.36617E+03
0.319	0.28405E+03
0.350	0.23330E+03
0.384	0.19801E+03
0.415	0.14590E+03
0.441	0.61917E+02
0.463	0.34878E+02
0.483	0.22549E+02
0.500	0.15970E+02
0.514	0.12028E+02
0.536	0.93338E+01
0.550	0.74157E+01
0.561	0.60001E+01
0.536	0.34712E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 146

0 MEASURED 1

• PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.18965E+01

SOIL HORIZON NUMBER 147 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.65 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.198	0.150E+05
0.201	0.600E+04
0.236	0.200E+04
0.216	0.100E+04
0.229	0.330E+03
0.264	0.100E+03
0.277	0.640E+02
0.332	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	30.6	0.306
2.00	30.9	0.003
3.00	31.1	0.002
4.00	31.3	0.002
5.00	31.4	0.001
6.00	31.6	0.001
7.00	31.7	0.001
8.00	31.8	0.001
9.00	31.9	0.001
10.00	32.0	0.001
20.00	32.3	0.003
30.00	32.7	0.006
40.00	33.1	0.005
50.00	33.5	0.003
60.00	33.8	0.002
70.00	34.1	0.001
80.00	34.5	0.001
90.00	34.7	0.001
100.00	35.0	0.016
200.00	36.0	0.026
300.00	37.0	0.064
400.00	38.0	0.068
500.00	39.0	0.077
600.00	40.0	0.081
700.00	41.0	0.076
800.00	42.0	0.057
900.00	43.0	0.041
1000.00	44.0	0.041
2000.00	100.0	0.151

PREDICTED MOISTURE CHARACTERISTIC DATA

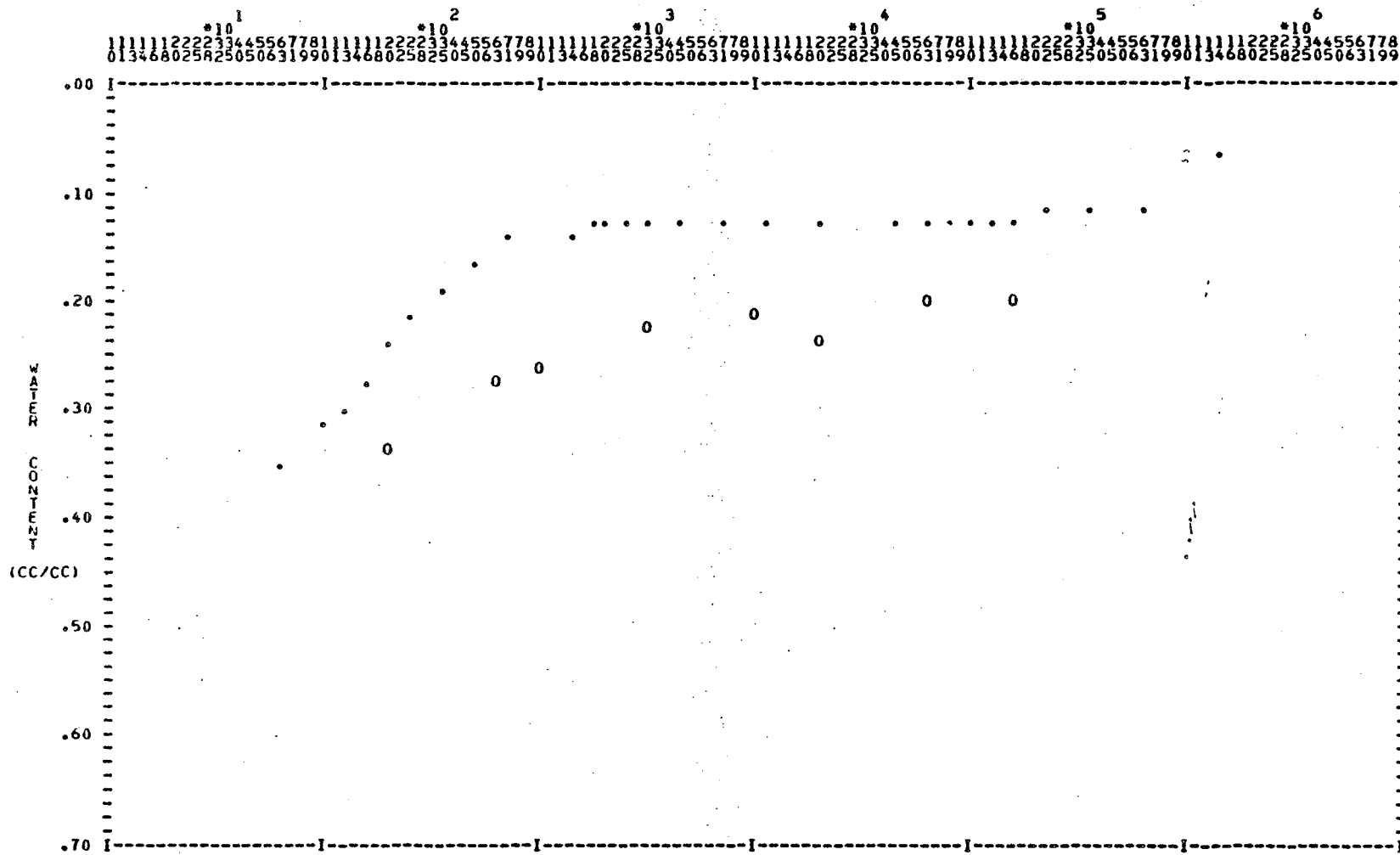
SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.058	0.14537E+06
0.117	0.60302E+05
0.118	0.34510E+05
0.118	0.22677E+05
0.119	0.16194E+05
0.119	0.12225E+05
0.220	0.96040E+04
0.220	0.77735E+04
0.221	0.64402E+04
0.222	0.46136E+04
0.225	0.19946E+04
0.227	0.11290E+04
0.228	0.70902E+03
0.229	0.47149E+03
0.230	0.33166E+03
0.230	0.25146E+03
0.230	0.20298E+03
0.231	0.17125E+03
0.231	0.14447E+03
0.232	0.11146E+03
0.232	0.49741E+02
0.233	0.33945E+02
0.233	0.25325E+02
0.233	0.19667E+02
0.233	0.15368E+02
0.233	0.12009E+02
0.233	0.95524E+01
0.233	0.59631E+01

ALPHA = 1.38

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SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 147

0 MEASURED :      • PREDICTED

SUM OF (ABS(LOG(PSIN)-LOG(PSIP))) = 0.11671E+02

SOIL HORIZON NUMBER 148 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 0.99 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.086	0.150E+05
0.092	0.600E+04
0.107	0.200E+04
0.247	0.100E+04
0.292	0.330E+03
0.374	0.100E+03
0.453	0.600E+02
0.543	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

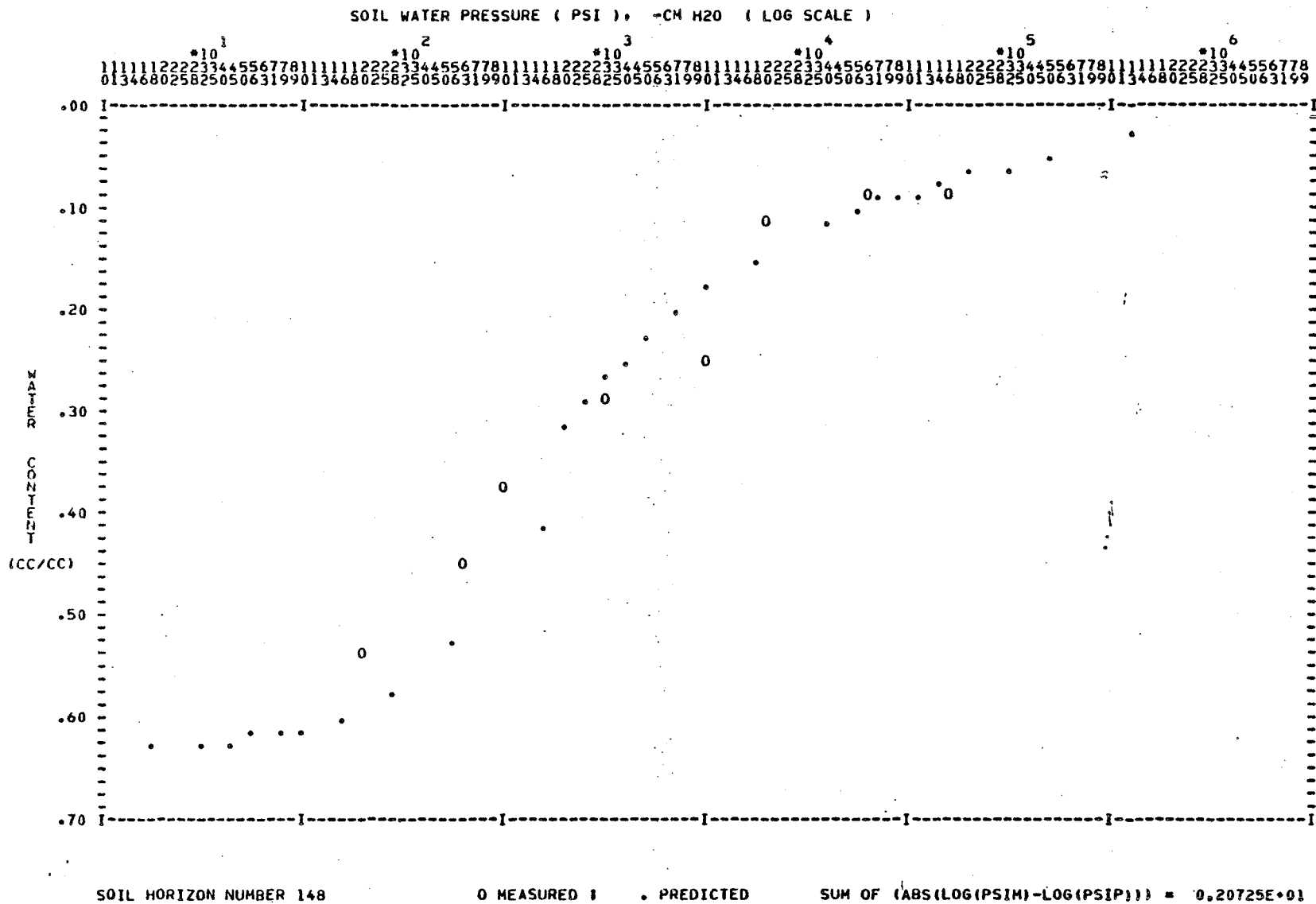
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	6.0	0.060
2.00	7.9	0.018
3.00	9.1	0.013
4.00	10.4	0.013
5.00	11.5	0.011
6.00	12.6	0.010
7.00	13.5	0.009
8.00	14.4	0.009
9.00	15.2	0.008
10.00	15.9	0.007
20.00	21.4	0.055
30.00	25.9	0.045
40.00	30.1	0.042
50.00	33.8	0.037
60.00	37.4	0.036
70.00	41.1	0.037
80.00	44.6	0.035
90.00	47.9	0.033
100.00	50.9	0.030
200.00	78.8	0.279
300.00	90.2	0.113
400.00	94.6	0.044
500.00	96.5	0.019
600.00	97.5	0.010
700.00	98.4	0.008
800.00	99.0	0.006
900.00	99.3	0.004
1000.00	99.5	0.002
2000.00	100.0	0.005

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.024	0.12261E+06
0.053	0.51042E+06
0.061	0.30326E+06
0.069	0.20074E+06
0.075	0.14378E+06
0.082	0.10868E+06
0.087	0.85395E+05
0.093	0.69101E+05
0.097	0.57217E+05
0.117	0.40804E+05
0.148	0.17602E+05
0.175	0.10264E+05
0.200	0.67622E+04
0.223	0.49092E+04
0.246	0.37818E+04
0.268	0.29958E+04
0.290	0.24305E+04
0.309	0.20112E+04
0.406	0.14971E+04
0.529	0.56575E+03
0.579	0.27899E+03
0.599	0.16010E+03
0.608	0.10437E+03
0.614	0.76570E+02
0.618	0.57358E+02
0.621	0.43203E+02
0.623	0.31677E+02
0.625	0.18763E+02

ALPHA = 1.38

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SOIL HORIZON NUMBER 149 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.39 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.051	0.150E+05
0.064	0.600E+04
0.101	0.200E+04
0.167	0.100E+04
0.186	0.330E+03
0.232	0.100E+03
0.281	0.600E+02
0.431	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

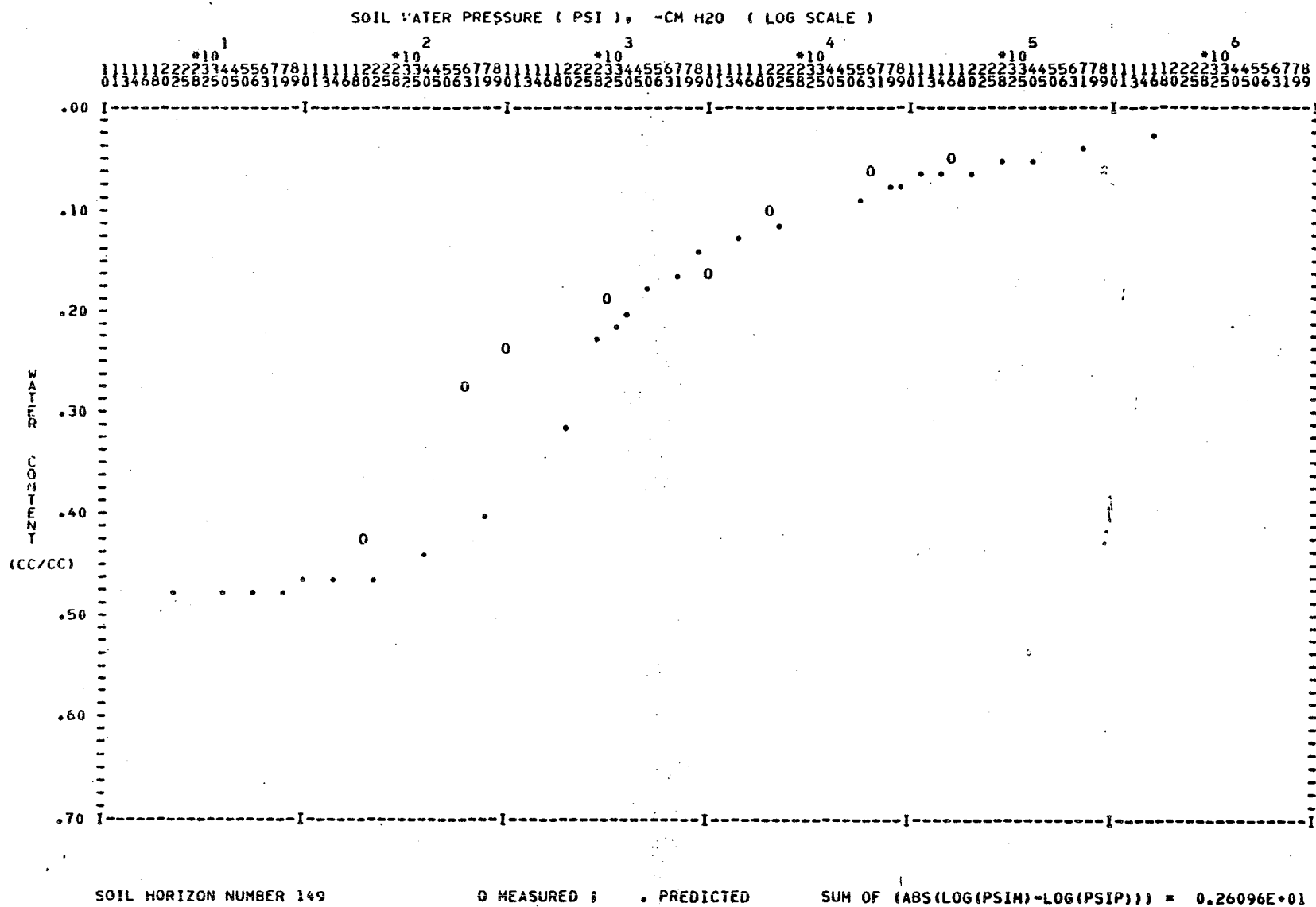
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	6.5	0.065
2.00	8.3	0.017
3.00	9.0	0.013
4.00	10.7	0.012
5.00	11.8	0.011
6.00	11.8	0.010
7.00	14.5	0.009
8.00	15.2	0.008
9.00	15.5	0.007
10.00	15.5	0.007
20.00	20.6	0.048
30.00	24.3	0.037
40.00	28.1	0.037
50.00	31.6	0.035
60.00	35.4	0.038
70.00	39.4	0.040
80.00	43.3	0.039
90.00	47.0	0.037
100.00	50.3	0.033
200.00	79.3	0.290
300.00	91.0	0.118
400.00	95.4	0.044
500.00	97.2	0.018
600.00	98.0	0.009
700.00	98.1	0.007
800.00	98.4	0.005
900.00	99.7	0.003
1000.00	99.8	0.001
2000.00	100.0	0.002

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.019	0.16473E+06
0.042	0.70025E+05
0.048	0.40931E+05
0.053	0.27057E+05
0.058	0.19344E+05
0.063	0.14509E+05
0.067	0.11443E+05
0.070	0.92421E+04
0.074	0.76386E+04
0.087	0.54038E+04
0.107	0.23157E+04
0.125	0.13642E+04
0.143	0.90997E+03
0.150	0.67240E+03
0.178	0.52368E+03
0.197	0.41612E+03
0.215	0.33749E+03
0.231	0.27866E+03
0.308	0.20503E+03
0.405	0.77468E+02
0.443	0.37891E+02
0.458	0.21483E+02
0.464	0.13899E+02
0.468	0.10189E+02
0.471	0.75691E+01
0.473	0.56591E+01
0.474	0.39990E+01
0.475	0.21441E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 150 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.56 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PHESSURE (-CM H2O)
0.061	0.150E+05
0.090	0.600E+04
0.123	0.200E+04
0.204	0.100E+04
0.223	0.330E+03
0.255	0.100E+03
0.285	0.600E+02
0.362	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

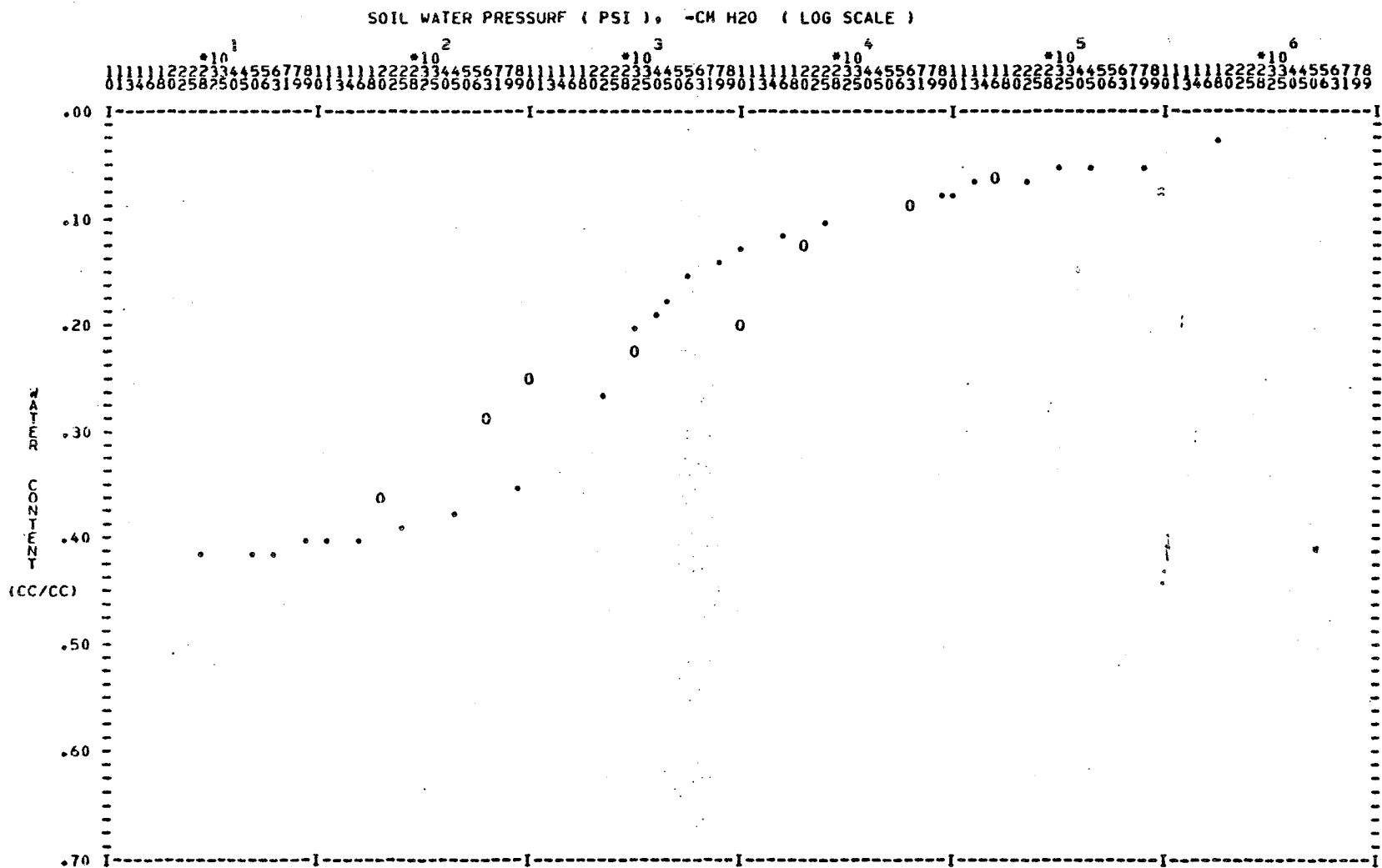
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	8.8	0.088
2.00	10.5	0.017
3.00	11.7	0.012
4.00	12.9	0.012
5.00	14.0	0.011
6.00	14.9	0.009
7.00	15.9	0.008
8.00	16.9	0.008
9.00	17.9	0.007
10.00	17.9	0.006
20.00	22.9	0.044
30.00	25.7	0.034
40.00	29.1	0.034
50.00	32.3	0.032
60.00	35.9	0.036
70.00	39.8	0.039
80.00	43.6	0.038
90.00	47.9	0.036
100.00	50.9	0.033
200.00	78.7	0.262
300.00	90.3	0.116
400.00	94.7	0.044
500.00	96.6	0.019
600.00	97.6	0.010
700.00	98.4	0.008
800.00	99.0	0.006
900.00	99.3	0.004
1000.00	99.5	0.002
2000.00	100.0	0.005

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PHESSURE ( -CM H2O )
0.022	0.18751E+06
0.046	0.79541E+05
0.051	0.46380E+05
0.055	0.30514E+05
0.059	0.21863E+05
0.063	0.16477E+05
0.066	0.12912E+05
0.069	0.10421E+05
0.072	0.86077E+04
0.083	0.60739E+04
0.099	0.25888E+04
0.113	0.15249E+04
0.126	0.10152E+04
0.140	0.75807E+03
0.156	0.59333E+03
0.172	0.47227E+03
0.187	0.38320E+03
0.201	0.31633E+03
0.266	0.23239E+03
0.348	0.87947E+02
0.381	0.42249E+02
0.394	0.24704E+02
0.399	0.16069E+02
0.403	0.11783E+02
0.406	0.88251E+01
0.408	0.66489E+01
0.409	0.48811E+01
0.410	0.29066E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 150

SOIL HORIZON NUMBER 151 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.61 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.134	0.150E+05
0.161	0.600E+04
0.190	0.200E+04
0.245	0.100E+04
0.261	0.330E+03
0.293	0.100E+03
0.325	0.600E+02
0.362	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	20.4	0.204
2.00	21.3	0.009
3.00	22.0	0.007
4.00	22.7	0.007
5.00	23.4	0.006
6.00	23.9	0.006
7.00	24.5	0.005
8.00	24.9	0.005
9.00	25.3	0.004
10.00	25.7	0.004
20.00	28.3	0.026
30.00	30.3	0.020
40.00	32.6	0.023
50.00	35.1	0.025
60.00	38.2	0.032
70.00	42.2	0.038
80.00	46.0	0.039
90.00	49.6	0.036
100.00	52.9	0.033
200.00	79.6	0.267
300.00	90.4	0.109
400.00	94.6	0.041
500.00	96.4	0.018
600.00	97.2	0.011
700.00	98.3	0.008
800.00	98.9	0.006
900.00	99.3	0.004
1000.00	99.5	0.002
2000.00	100.0	0.005

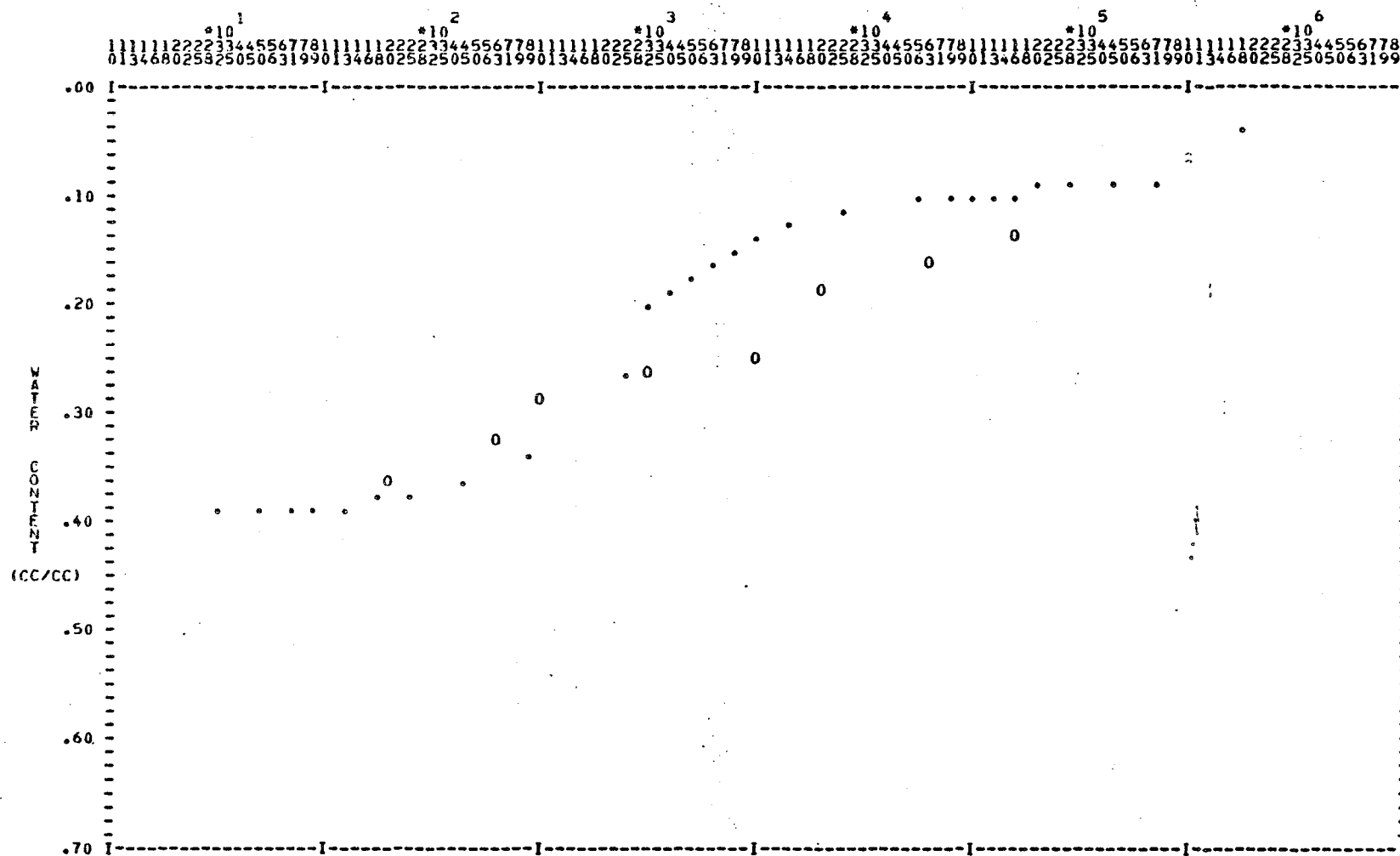
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.042	0.17277E+06
0.085	0.74349E+05
0.088	0.43815E+05
0.090	0.28997E+05
0.093	0.20718E+05
0.095	0.15607E+05
0.097	0.12219E+05
0.099	0.98514E+04
0.100	0.81270E+04
0.106	0.56954E+04
0.115	0.24381E+04
0.123	0.14758E+04
0.133	0.10077E+04
0.144	0.77282E+03
0.158	0.61518E+03
0.173	0.49180E+03
0.188	0.39890E+03
0.201	0.32847E+03
0.260	0.23911E+03
0.334	0.90404E+02
0.363	0.44380E+02
0.375	0.25558E+02
0.380	0.16902E+02
0.384	0.12416E+02
0.387	0.93067E+01
0.389	0.70117E+01
0.390	0.51389E+01
0.391	0.30229E+01

ALPHA = 1.38



SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 151

0 MEASURED :

• PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.44042E+01

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SOIL HORIZON NUMBER 152 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.62 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.099	0.150E+05
0.117	0.600E+04
0.143	0.200E+04
0.194	0.100E+04
0.215	0.330E+03
0.240	0.100E+03
0.295	0.600E+02
0.361	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	15.2	0.152
2.00	15.7	0.005
3.00	16.1	0.004
4.00	16.6	0.005
5.00	17.0	0.004
6.00	17.4	0.004
7.00	17.8	0.003
8.00	18.1	0.003
9.00	18.3	0.003
10.00	18.6	0.002
20.00	20.0	0.016
30.00	21.5	0.013
40.00	23.3	0.017
50.00	25.5	0.020
60.00	28.3	0.033
70.00	33.1	0.046
80.00	37.8	0.047
90.00	42.3	0.044
100.00	46.7	0.039
200.00	78.7	0.325
300.00	91.2	0.125
400.00	95.5	0.043
500.00	97.7	0.017
600.00	98.1	0.009
700.00	98.8	0.007
800.00	99.3	0.005
900.00	99.6	0.003
1000.00	99.7	0.001
2000.00	100.0	0.003

PREDICTED MOISTURE CHARACTERISTIC DATA

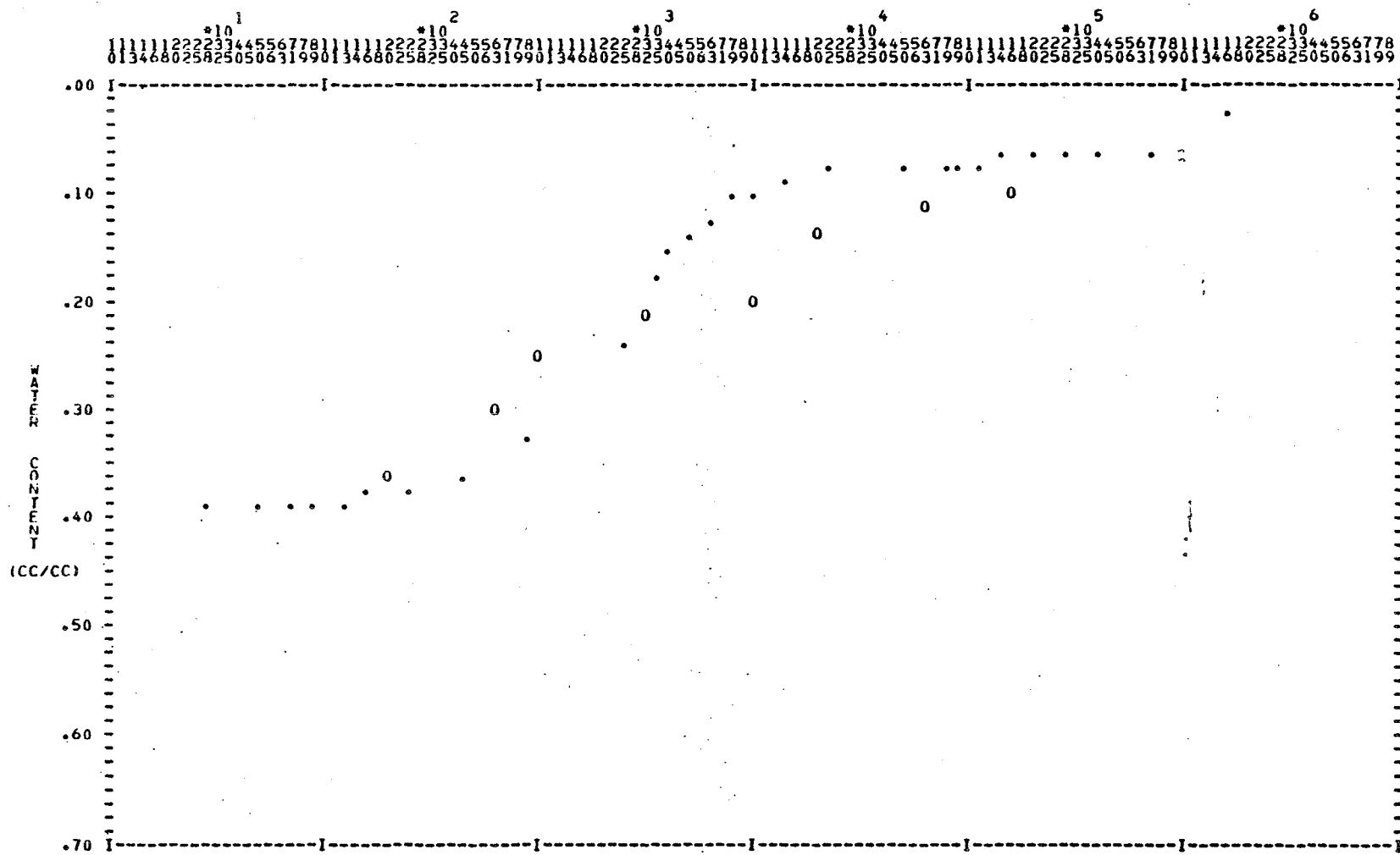
SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.031	0.15652E+06
0.062	0.68409E+05
0.064	0.40720E+05
0.065	0.27011E+05
0.067	0.19306E+05
0.068	0.14538E+05
0.070	0.11374E+05
0.071	0.91611E+04
0.072	0.75492E+04
0.075	0.52568E+04
0.081	0.32834E+04
0.087	0.14046E+04
0.094	0.97407E+03
0.104	0.78413E+03
0.120	0.64026E+03
0.138	0.51509E+03
0.156	0.41814E+03
0.172	0.34343E+03
0.243	0.25017E+03
0.330	0.93630E+02
0.363	0.65143E+02
0.375	0.59314E+02
0.379	0.56377E+02
0.383	0.52053E+02
0.385	0.49023E+02
0.386	0.47606E+02
0.387	0.48547E+02
0.388	0.27651E+02

ALPHA = 1.38

B-304

B-305

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 153 ( SEE TABLE 4 FOR IDENTIFICATION )

# DENSITY DATA:

BULK DENSITY = 1.52 G/CM\*\*3  
 PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

# MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.062	0.150E+05
0.074	0.600E+04
0.084	0.200E+04
0.116	0.100E+04
0.146	0.330E+03
0.172	0.100E+03
0.255	0.600E+02
0.398	0.200E+02

# PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	9.9	0.099
2.00	10.3	0.003
4.00	10.8	0.003
6.00	11.1	0.003
8.00	11.4	0.003
10.00	11.7	0.002
12.00	11.9	0.002
14.00	12.1	0.002
16.00	12.3	0.002
18.00	12.4	0.011
20.00	12.5	0.011
25.00	12.6	0.013
30.00	12.7	0.013
35.00	12.8	0.028
40.00	12.9	0.043
45.00	13.0	0.047
50.00	13.1	0.046
60.00	13.2	0.042
70.00	13.3	0.096
80.00	13.4	0.141
90.00	13.5	0.399
100.00	13.6	0.141
200.00	13.7	0.047
300.00	13.8	0.041
400.00	13.9	0.016
500.00	14.0	0.007
600.00	14.1	0.005
700.00	14.2	0.004
800.00	14.3	0.002
900.00	14.4	0.001
1000.00	14.5	0.001
2000.00	100.0	0.003

# PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.022	0.13465E+06
0.044	0.5918E+05
0.046	0.3534E+05
0.047	0.2346E+05
0.048	0.16770E+05
0.049	0.12625E+05
0.050	0.98740E+04
0.051	0.79496E+04
0.052	0.65479E+04
0.055	0.45477E+04
0.059	0.2015E+04
0.064	0.1234E+04
0.070	0.8342E+03
0.079	0.7002E+03
0.094	0.5860E+03
0.113	0.4757E+03
0.133	0.3885E+03
0.151	0.3208E+03
0.245	0.2405E+03
0.360	0.8848E+02
0.400	0.4233E+02
0.414	0.2523E+02
0.418	0.1452E+02
0.421	0.1055E+02
0.423	0.7991E+01
0.424	0.5963E+01
0.425	0.4323E+01
0.426	0.2557E+01

ALPHA = 1.38



SOIL HORIZON NUMBER 154 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 0.95 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.054	0.150E+05
0.071	0.600E+04
0.093	0.200E+04
0.149	0.100E+04
0.193	0.330E+03
0.267	0.100E+03
0.346	0.600E+02
0.511	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	9.3	0.093
2.00	11.0	0.017
3.00	12.2	0.012
4.00	13.3	0.011
5.00	14.4	0.010
6.00	15.3	0.009
7.00	16.2	0.009
8.00	17.0	0.008
9.00	17.8	0.008
10.00	18.5	0.007
20.00	24.2	0.057
30.00	29.3	0.051
40.00	33.4	0.041
50.00	36.2	0.028
60.00	37.9	0.017
70.00	38.9	0.010
80.00	39.7	0.008
90.00	40.6	0.008
100.00	41.5	0.009
200.00	54.4	0.129
300.00	67.5	0.131
400.00	83.1	0.156
500.00	91.1	0.086
600.00	95.2	0.035
700.00	97.4	0.022
800.00	98.3	0.009
900.00	99.3	0.011
1000.00	99.7	0.002
2000.00	100.0	0.003

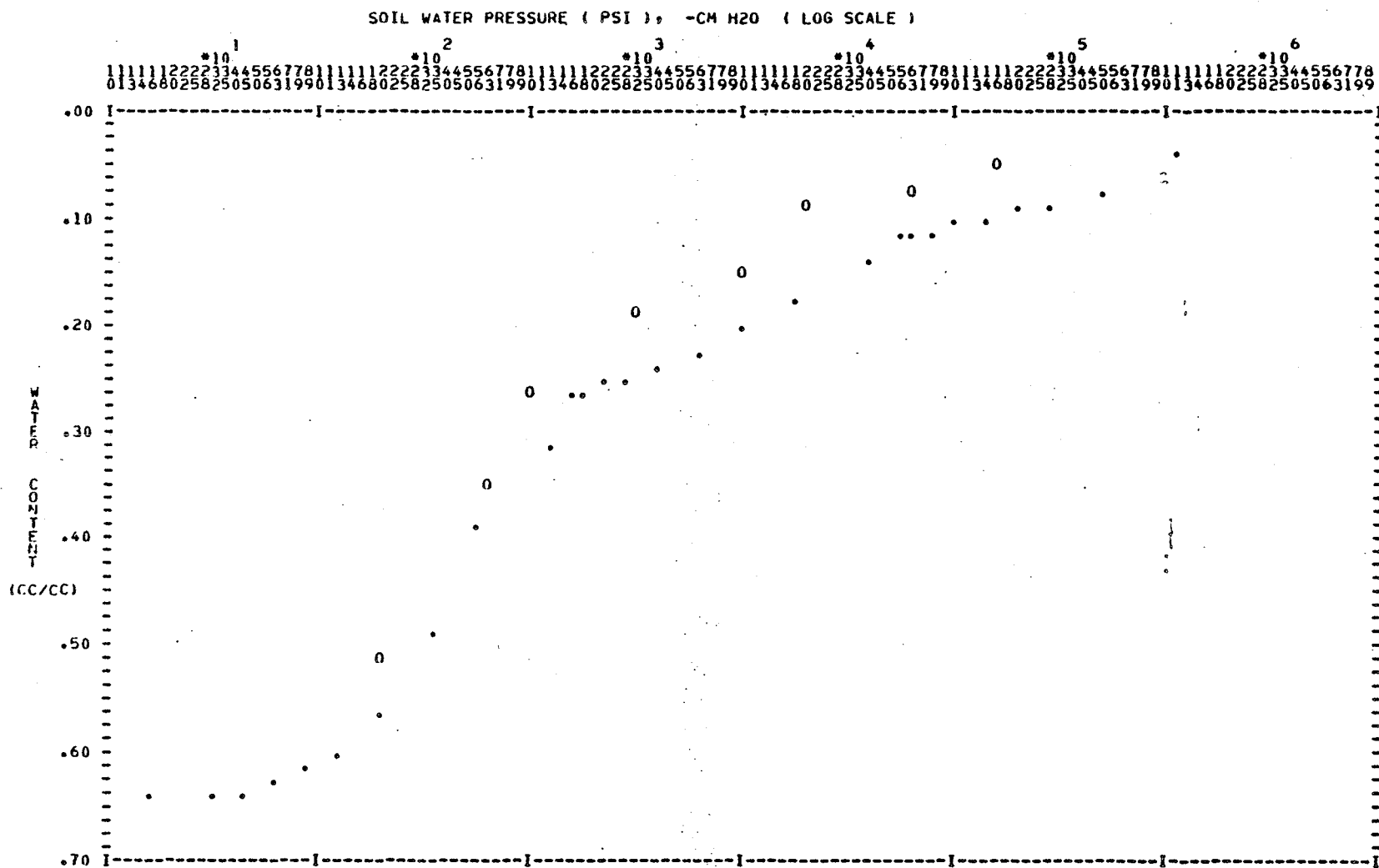
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.035	0.11813E+06
0.074	0.49487E+05
0.082	0.28701E+05
0.089	0.19018E+05
0.095	0.13663E+05
0.101	0.10362E+05
0.106	0.81702E+04
0.111	0.66335E+04
0.116	0.55103E+04
0.137	0.39828E+04
0.171	0.17448E+04
0.201	0.99001E+03
0.223	0.62051E+03
0.238	0.40930E+03
0.246	0.28780E+03
0.252	0.22108E+03
0.258	0.18170E+03
0.263	0.15567E+03
0.308	0.12516E+03
0.391	0.56353E+02
0.483	0.34262E+02
0.561	0.20642E+02
0.600	0.12719E+02
0.618	0.89531E+01
0.630	0.64872E+01
0.636	0.47204E+01
0.639	0.32442E+01
0.641	0.16482E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 155 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.36 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.057	0.150E+05
0.075	0.600E+04
0.103	0.200E+04
0.154	0.100E+04
0.182	0.130E+03
0.207	0.100E+03
0.219	0.600E+02
0.344	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	7.2	0.072
2.00	25.2	0.016
3.00	35.3	0.011
4.00	40.0	0.011
5.00	45.0	0.010
6.00	48.0	0.009
7.00	50.7	0.009
8.00	52.5	0.008
9.00	53.3	0.008
10.00	54.1	0.007
20.00	57.9	0.058
30.00	59.4	0.055
40.00	60.9	0.046
50.00	62.0	0.031
60.00	63.2	0.018
70.00	64.9	0.011
80.00	66.8	0.009
90.00	67.7	0.009
100.00	68.9	0.010
200.00	73.9	0.132
300.00	77.4	0.134
400.00	83.3	0.159
500.00	87.0	0.087
600.00	92.4	0.034
700.00	97.5	0.021
800.00	98.7	0.012
900.00	99.4	0.007
1000.00	99.6	0.002
2000.00	100.0	0.004

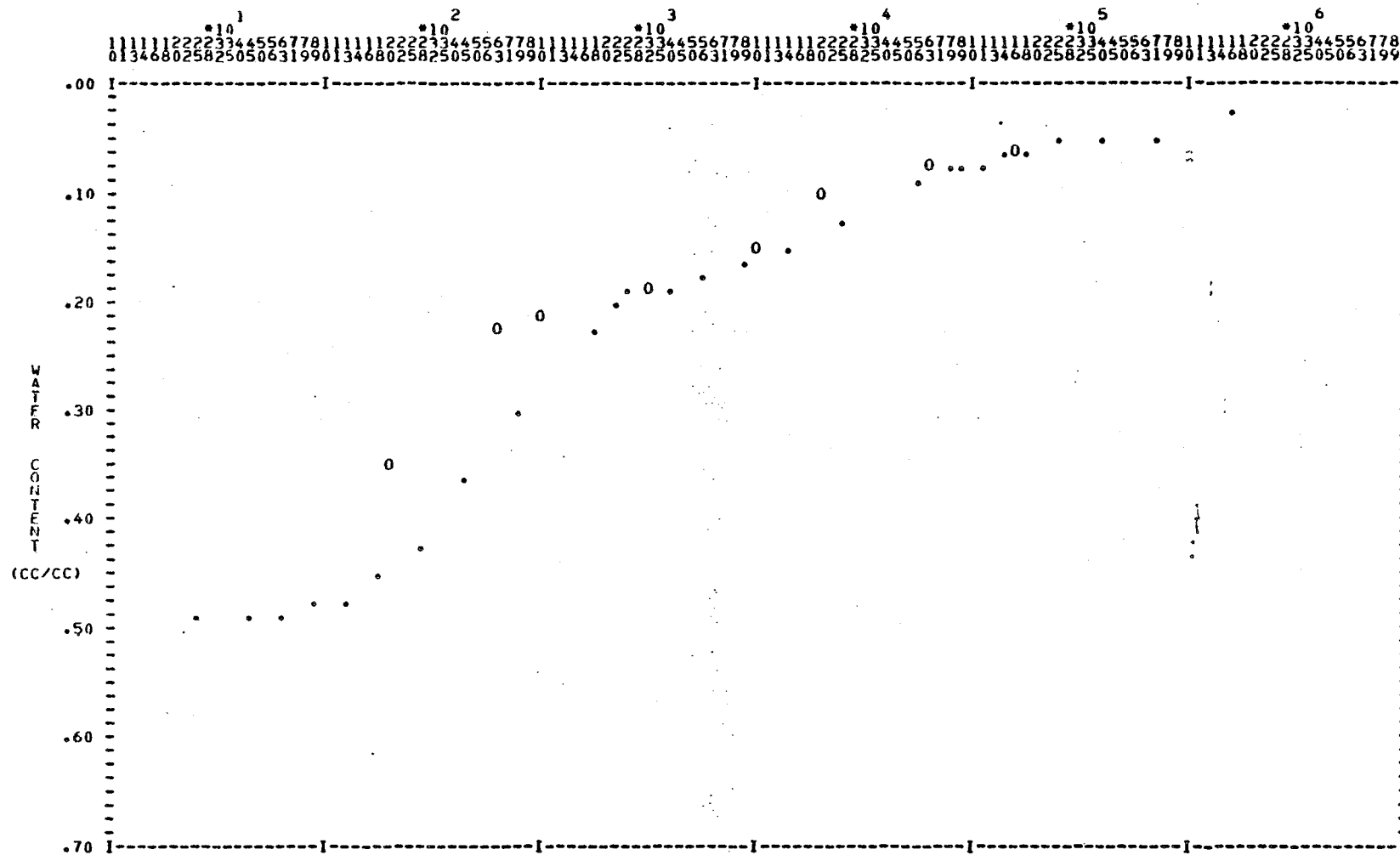
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.021	0.15913E+06
0.046	0.66916E+05
0.051	0.39016E+05
0.056	0.25939E+05
0.061	0.18679E+05
0.065	0.14192E+05
0.069	0.11207E+05
0.073	0.91100E+04
0.076	0.75755E+04
0.092	0.54942E+04
0.120	0.24337E+04
0.144	0.13857E+04
0.163	0.86582E+03
0.175	0.56942E+03
0.182	0.40099E+03
0.187	0.30809E+03
0.191	0.25319E+03
0.196	0.21674E+03
0.230	0.17274E+03
0.295	0.17767E+03
0.367	0.47314E+03
0.427	0.28401E+03
0.456	0.17322E+03
0.469	0.12160E+03
0.477	0.88003E+02
0.482	0.64081E+02
0.484	0.44499E+02
0.486	0.23911E+02

ALPHA = 1.38



SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 155

0 MEASURED ;

• PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.19834E+01

SOIL HORIZON NUMBER 156 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.41 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.059	0.150E+05
0.076	0.600E+04
0.109	0.200E+04
0.166	0.180E+04
0.200	0.330E+03
0.214	0.100E+03
0.226	0.600E+02
0.361	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	7.3	0.073
2.00	9.1	0.018
3.00	10.3	0.012
4.00	11.5	0.011
5.00	12.5	0.010
6.00	13.5	0.010
7.00	14.4	0.009
8.00	15.2	0.009
9.00	16.1	0.008
10.00	16.8	0.008
20.00	23.0	0.062
30.00	28.6	0.056
40.00	33.1	0.045
50.00	36.2	0.031
60.00	38.1	0.019
70.00	39.3	0.012
80.00	40.3	0.010
90.00	41.3	0.010
100.00	42.4	0.011
200.00	55.5	0.131
300.00	68.6	0.131
400.00	84.2	0.156
500.00	92.6	0.084
600.00	95.9	0.033
700.00	97.8	0.020
800.00	99.0	0.012
900.00	99.6	0.006
1000.00	99.8	0.002
2000.00	100.0	0.002

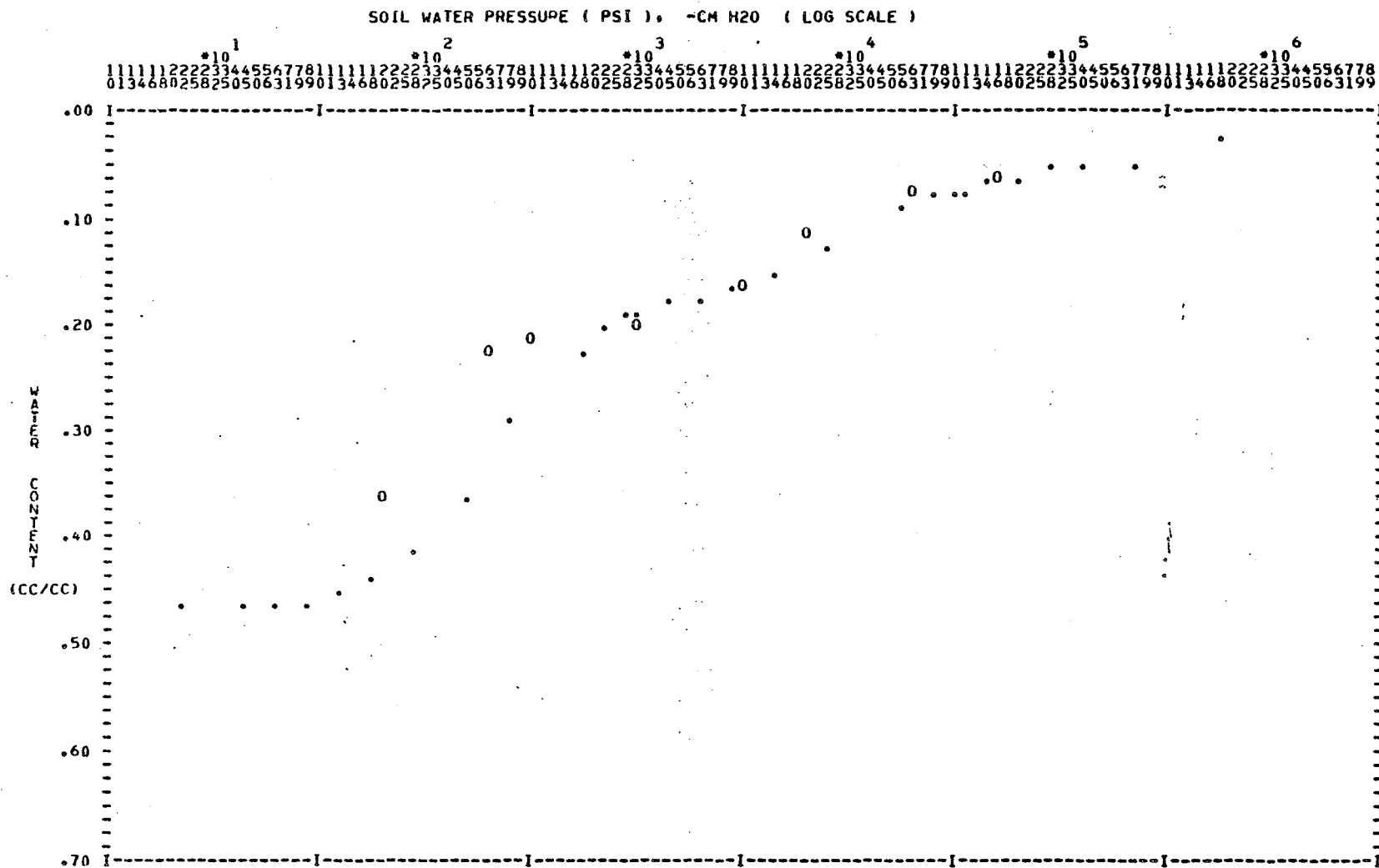
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.021	0.16876E+06
0.045	0.70680E+05
0.051	0.41047E+05
0.056	0.27248E+05
0.061	0.19608E+05
0.065	0.14893E+05
0.069	0.11758E+05
0.073	0.95577E+04
0.077	0.79474E+04
0.093	0.57660E+04
0.121	0.25350E+04
0.144	0.14383E+04
0.162	0.90064E+03
0.174	0.59758E+03
0.181	0.42541E+03
0.186	0.32764E+03
0.193	0.26780E+03
0.196	0.22746E+03
0.229	0.17907E+03
0.290	0.80243E+02
0.357	0.48915E+02
0.414	0.29349E+02
0.441	0.17866E+02
0.453	0.12518E+02
0.463	0.90309E+01
0.465	0.65399E+01
0.467	0.44502E+01
0.467	0.21768E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 157 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.50 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.115	0.150E+05
0.138	0.600E+04
0.169	0.200E+04
0.223	0.100E+04
0.249	0.330E+03
0.270	0.100E+03
0.276	0.600E+02
0.352	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	15.3	0.153
2.00	16.9	0.016
3.00	18.1	0.012
4.00	19.1	0.011
5.00	20.1	0.010
6.00	21.1	0.009
7.00	21.9	0.009
8.00	22.7	0.008
9.00	23.5	0.008
10.00	24.2	0.007
20.00	29.9	0.057
30.00	35.2	0.053
40.00	39.5	0.043
50.00	42.4	0.029
60.00	44.1	0.017
70.00	45.1	0.010
80.00	45.9	0.008
90.00	46.8	0.008
100.00	47.7	0.009
200.00	50.8	0.121
300.00	71.7	0.119
400.00	85.5	0.138
500.00	93.1	0.076
600.00	96.1	0.030
700.00	98.0	0.018
800.00	99.1	0.011
900.00	99.6	0.006
1000.00	99.8	0.002
2000.00	100.0	0.002

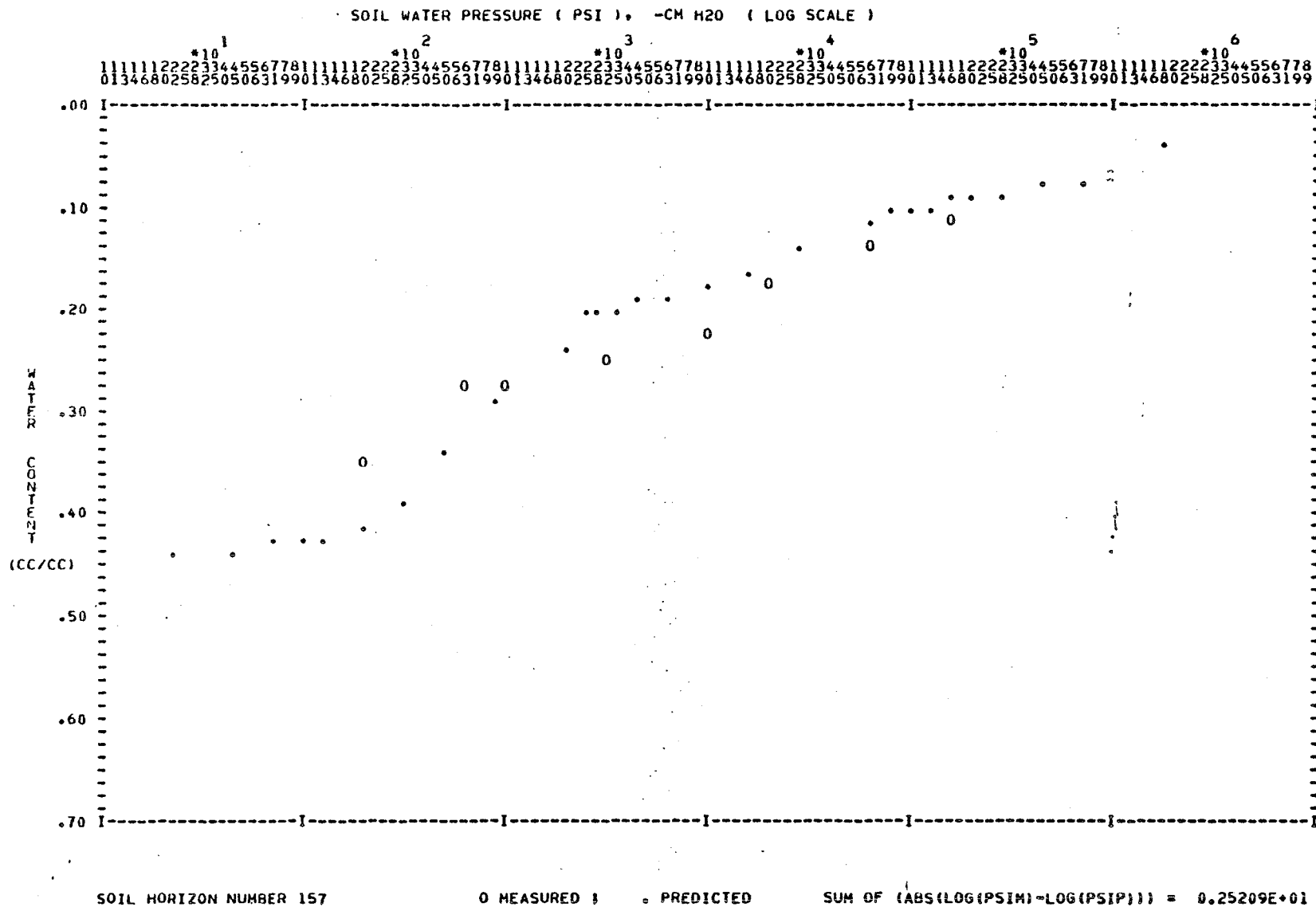
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.037	0.17821E+06
0.076	0.74866E+05
0.081	0.43563E+05
0.085	0.28915E+05
0.089	0.20795E+05
0.093	0.15783E+05
0.097	0.12452E+05
0.100	0.10114E+05
0.103	0.84044E+04
0.117	0.60812E+04
0.141	0.26857E+04
0.162	0.15273E+04
0.178	0.95310E+03
0.188	0.62527E+03
0.193	0.43901E+03
0.197	0.33726E+03
0.201	0.27776E+03
0.205	0.23838E+03
0.233	0.18875E+03
0.285	0.84440E+02
0.341	0.51232E+02
0.388	0.30797E+02
0.411	0.18865E+02
0.421	0.13224E+02
0.427	0.95450E+01
0.431	0.69168E+01
0.433	0.47173E+01
0.434	0.23314E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 158 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.60 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.131	0.150E+05
0.150	0.600E+04
0.182	0.200E+04
0.254	0.100E+04
0.282	0.330E+03
0.294	0.100E+03
0.299	0.600E+02
0.357	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

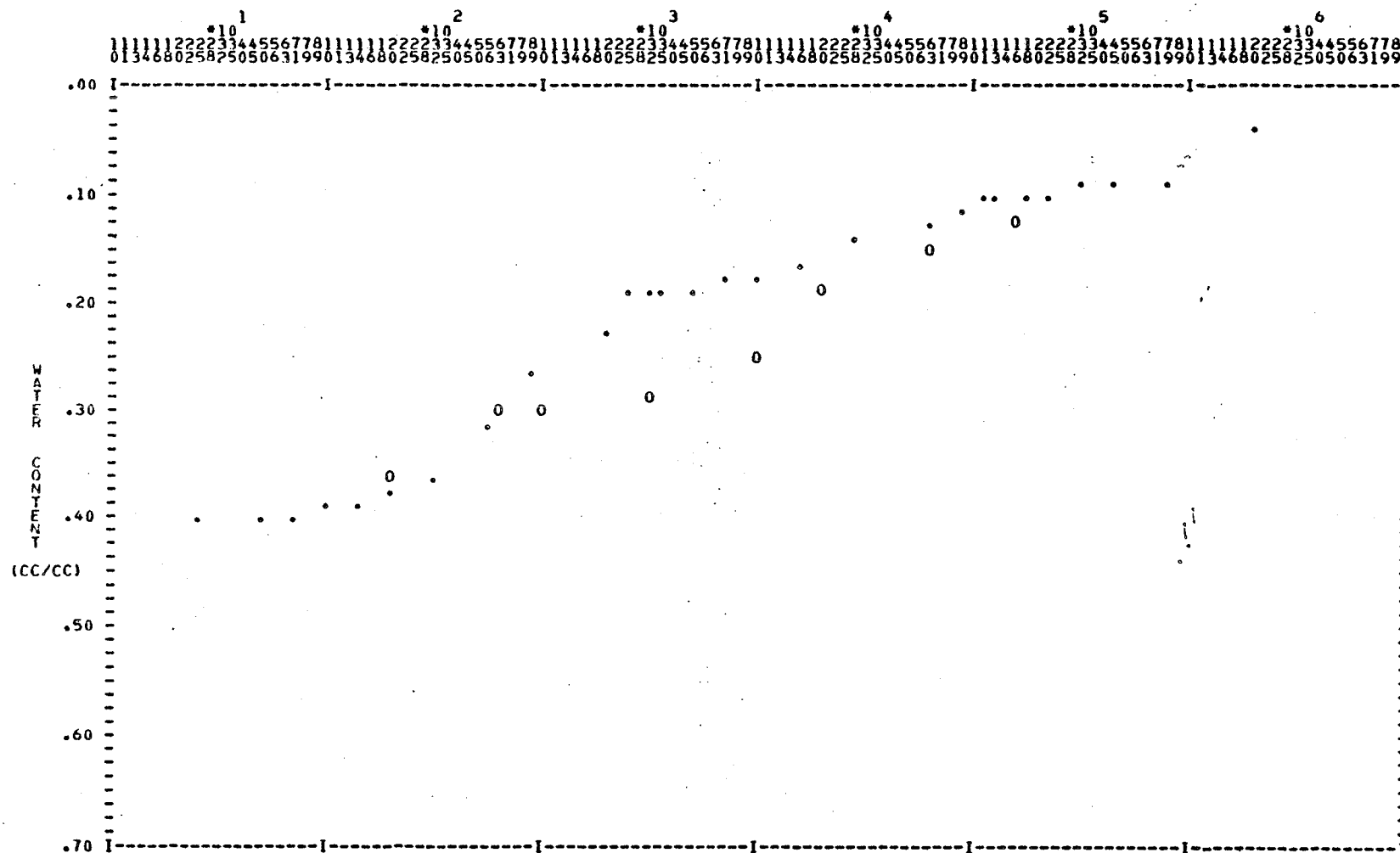
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	18.8	0.188
2.00	20.4	0.016
3.00	21.5	0.011
4.00	22.6	0.010
5.00	23.5	0.010
6.00	24.4	0.009
7.00	25.2	0.008
8.00	26.0	0.008
9.00	26.7	0.007
10.00	27.4	0.007
20.00	32.8	0.054
30.00	37.6	0.048
40.00	41.4	0.039
50.00	44.1	0.027
60.00	45.7	0.016
70.00	46.7	0.010
80.00	47.5	0.008
90.00	48.4	0.008
100.00	49.3	0.009
200.00	61.6	0.123
300.00	73.4	0.118
400.00	86.6	0.132
500.00	93.8	0.072
600.00	96.6	0.028
700.00	98.2	0.016
800.00	99.2	0.009
900.00	99.6	0.005
1000.00	99.8	0.002
2000.00	100.0	0.002

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.040	0.19290E+06
0.083	0.80704E+05
0.087	0.46763E+05
0.091	0.30987E+05
0.095	0.22267E+05
0.098	0.16892E+05
0.102	0.13324E+05
0.104	0.10821E+05
0.107	0.89915E+04
0.119	0.65068E+04
0.139	0.28488E+04
0.157	0.16155E+04
0.169	0.10135E+04
0.178	0.67038E+03
0.183	0.47349E+03
0.187	0.36471E+03
0.190	0.29998E+03
0.194	0.25672E+03
0.220	0.20474E+03
0.267	0.91124E+02
0.317	0.56899E+02
0.357	0.32922E+02
0.377	0.20059E+02
0.386	0.13983E+02
0.391	0.10047E+02
0.394	0.72563E+01
0.395	0.49539E+01
0.396	0.25199E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



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SOIL HORIZON NUMBER 159 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.69 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.130	0.150E+05
0.150	0.600E+04
0.177	0.200E+04
0.203	0.100E+04
0.228	0.330E+03
0.270	0.100E+03
0.272	0.600E+02
0.328	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	17.8	0.178
2.00	18.9	0.011
3.00	19.6	0.007
4.00	20.3	0.007
5.00	21.0	0.006
6.00	21.6	0.006
7.00	22.2	0.006
8.00	22.7	0.006
9.00	23.3	0.005
10.00	23.8	0.005
20.00	24.0	0.042
30.00	24.8	0.038
40.00	25.0	0.032
50.00	25.3	0.023
60.00	25.7	0.014
70.00	29.6	0.069
80.00	40.4	0.008
90.00	41.2	0.008
100.00	42.1	0.009
200.00	46.7	0.146
300.00	70.7	0.139
400.00	85.4	0.147
500.00	92.3	0.079
600.00	96.4	0.031
700.00	98.2	0.018
800.00	99.1	0.010
900.00	99.6	0.005
1000.00	99.8	0.002
2000.00	100.0	0.002

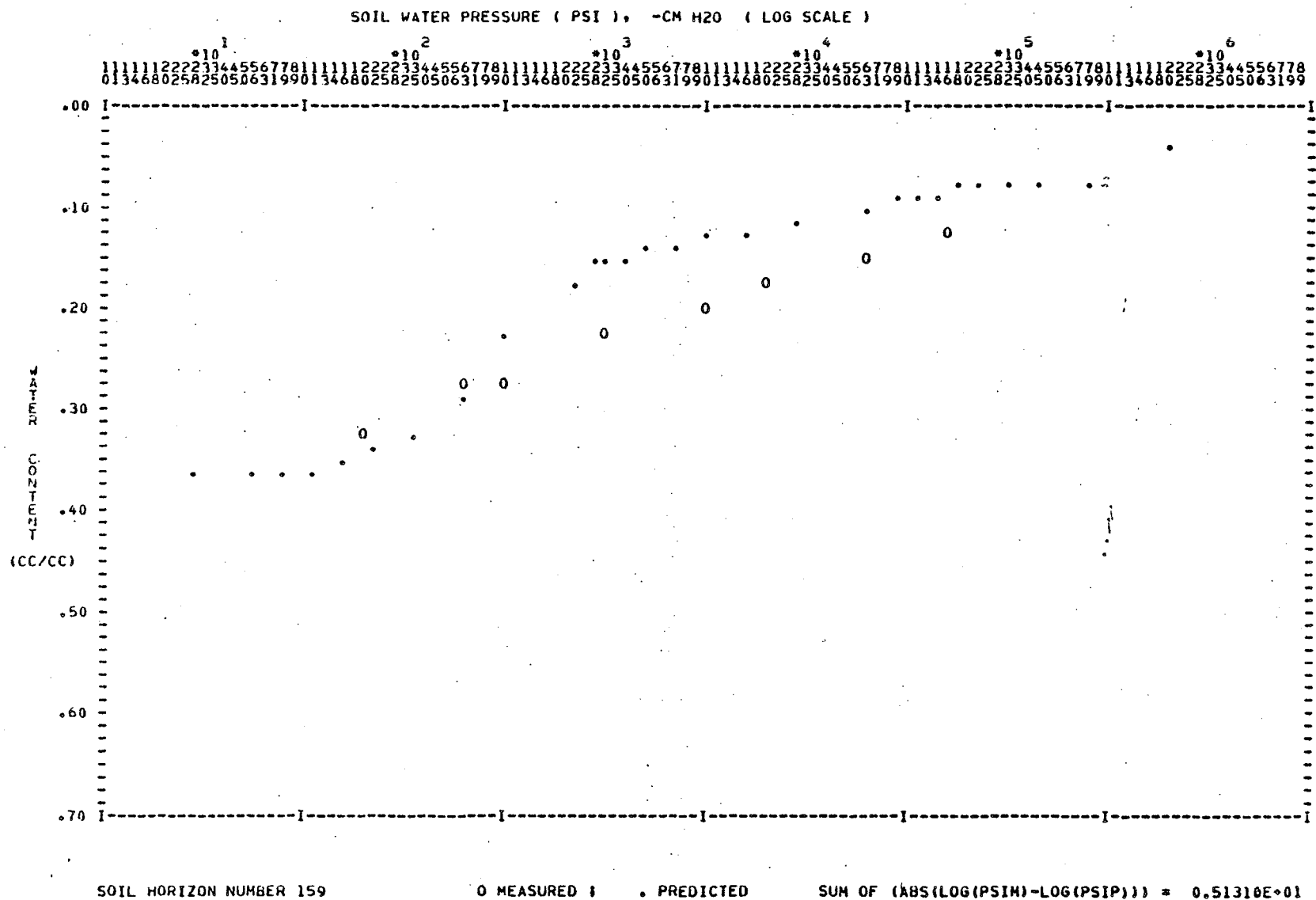
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.034	0.19158E+06
0.070	0.80032E+05
0.072	0.46494E+05
0.075	0.30952E+05
0.077	0.22340E+05
0.079	0.17015E+05
0.081	0.13466E+05
0.083	0.10970E+05
0.085	0.91320E+04
0.094	0.66768E+04
0.108	0.29408E+04
0.121	0.16725E+04
0.131	0.10568E+04
0.138	0.70509E+03
0.142	0.50143E+03
0.145	0.38779E+03
0.148	0.31897E+03
0.151	0.27242E+03
0.179	0.22748E+03
0.231	0.10107E+03
0.283	0.60207E+02
0.324	0.36080E+02
0.344	0.21991E+02
0.352	0.15251E+02
0.357	0.10905E+02
0.360	0.78405E+01
0.361	0.53310E+01
0.362	0.27085E+01

ALPHA = 1.38



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SOIL HORIZON NUMBER 160 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.55 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.073	0.150E+05
0.084	0.600E+04
0.096	0.200E+04
0.082	0.100E+04
0.104	0.330E+03
0.121	0.100E+03
0.132	0.600E+02
0.155	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERNAL FRACTION ( G/G )

1.00	11.1	0.111
2.00	11.5	0.004
3.00	11.8	0.003
4.00	12.1	0.003
5.00	12.4	0.003
6.00	12.7	0.003
7.00	13.0	0.003
8.00	13.2	0.003
9.00	13.5	0.002
10.00	13.7	0.002
20.00	15.7	0.020
30.00	17.8	0.021
40.00	19.8	0.020
50.00	21.3	0.015
60.00	22.6	0.013
70.00	23.9	0.013
80.00	25.1	0.013
90.00	26.4	0.012
100.00	27.6	0.012
200.00	47.7	0.201
300.00	65.3	0.176
400.00	82.1	0.168
500.00	91.4	0.093
600.00	95.3	0.039
700.00	97.4	0.021
800.00	98.6	0.012
900.00	99.2	0.006
1000.00	99.4	0.002
2000.00	100.0	0.006

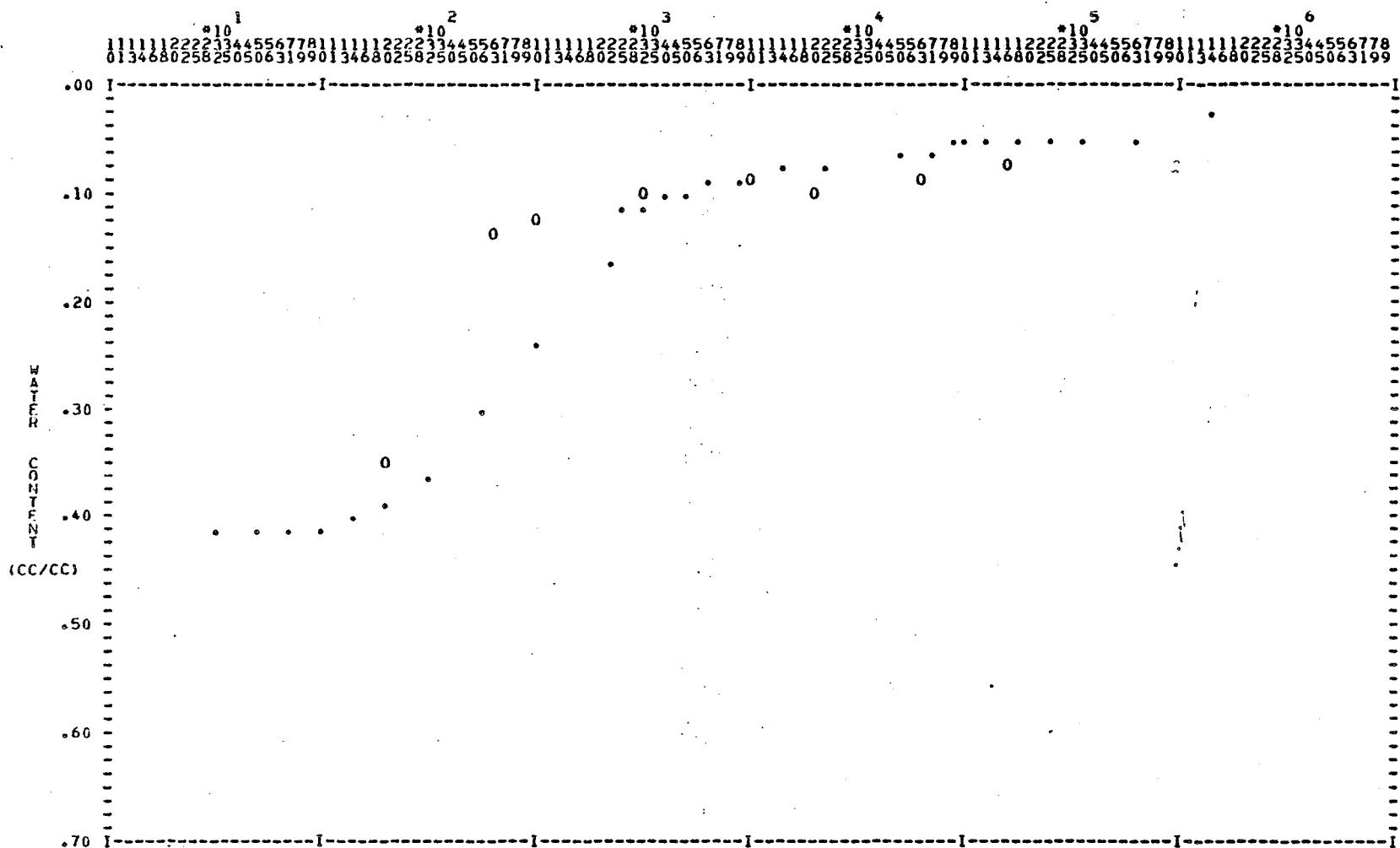
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.024	0.14139E+06
0.048	0.60196E+05
0.050	0.35623E+05
0.051	0.23879E+05
0.052	0.17288E+05
0.053	0.13187E+05
0.054	0.10444E+05
0.055	0.85104E+04
0.056	0.70906E+04
0.061	0.51755E+04
0.070	0.23430E+04
0.078	0.13663E+04
0.085	0.87801E+03
0.091	0.62106E+03
0.096	0.47608E+03
0.102	0.37911E+03
0.107	0.31058E+03
0.112	0.26005E+03
0.156	0.21618E+03
0.235	0.94509E+02
0.306	0.55233E+02
0.360	0.33273E+02
0.387	0.20545E+02
0.400	0.14142E+02
0.407	0.10064E+02
0.410	0.72551E+01
0.412	0.51178E+01
0.414	0.29857E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 161 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.06 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.099	0.150E+05
0.116	0.600E+04
0.161	0.200E+04
0.312	0.100E+04
0.347	0.330E+03
0.381	0.100E+03
0.398	0.600E+02
0.506	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	6.2	0.062
2.00	10.4	0.042
3.00	13.5	0.031
4.00	16.3	0.028
5.00	18.9	0.026
6.00	21.2	0.023
7.00	23.3	0.021
8.00	25.2	0.019
9.00	27.0	0.018
10.00	28.7	0.017
20.00	41.2	0.125
30.00	53.8	0.126
40.00	63.6	0.098
50.00	68.1	0.045
60.00	69.8	0.017
70.00	71.2	0.014
80.00	72.3	0.012
90.00	73.4	0.011
100.00	74.4	0.010
200.00	81.1	0.067
300.00	85.4	0.043
400.00	88.5	0.032
500.00	91.0	0.025
600.00	93.0	0.020
700.00	94.7	0.017
800.00	96.1	0.014
900.00	97.4	0.013
1000.00	98.5	0.011
2000.00	100.0	0.015

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.031	0.15260E+06
0.072	0.64328E+05
0.089	0.37407E+05
0.105	0.24736E+05
0.120	0.17716E+05
0.133	0.13393E+05
0.146	0.10527E+05
0.157	0.85222E+04
0.167	0.70596E+04
0.210	0.50461E+04
0.285	0.22679E+04
0.352	0.12744E+04
0.395	0.73996E+03
0.414	0.45035E+03
0.423	0.33124E+03
0.431	0.25698E+03
0.437	0.20730E+03
0.443	0.17217E+03
0.466	0.12063E+03
0.499	0.49735E+02
0.522	0.27671E+02
0.539	0.17770E+02
0.552	0.12478E+02
0.563	0.92964E+01
0.573	0.72101E+01
0.581	0.57641E+01
0.588	0.47182E+01
0.595	0.24442E+01

ALPHA = 1.38



SOIL HORIZON NUMBER 162 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.27 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.066	0.150E+05
0.088	0.600E+04
0.147	0.200E+04
0.245	0.100E+04
0.287	0.330E+03
0.319	0.100E+03
0.329	0.600E+02
0.451	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	6.7	0.067
2.00	11.5	0.048
3.00	14.8	0.033
4.00	17.8	0.030
5.00	20.5	0.026
6.00	22.8	0.024
7.00	25.0	0.021
8.00	26.9	0.019
9.00	28.7	0.018
10.00	30.4	0.017
20.00	43.2	0.121
30.00	55.3	0.123
40.00	63.2	0.086
50.00	68.0	0.048
60.00	70.2	0.022
70.00	71.3	0.012
80.00	71.9	0.006
90.00	72.0	0.001
100.00	72.0	0.000
200.00	79.2	0.069
300.00	83.2	0.041
400.00	87.7	0.045
500.00	90.5	0.028
600.00	92.2	0.017
700.00	93.4	0.012
800.00	94.4	0.010
900.00	95.7	0.013
1000.00	96.8	0.012
2000.00	100.0	0.016

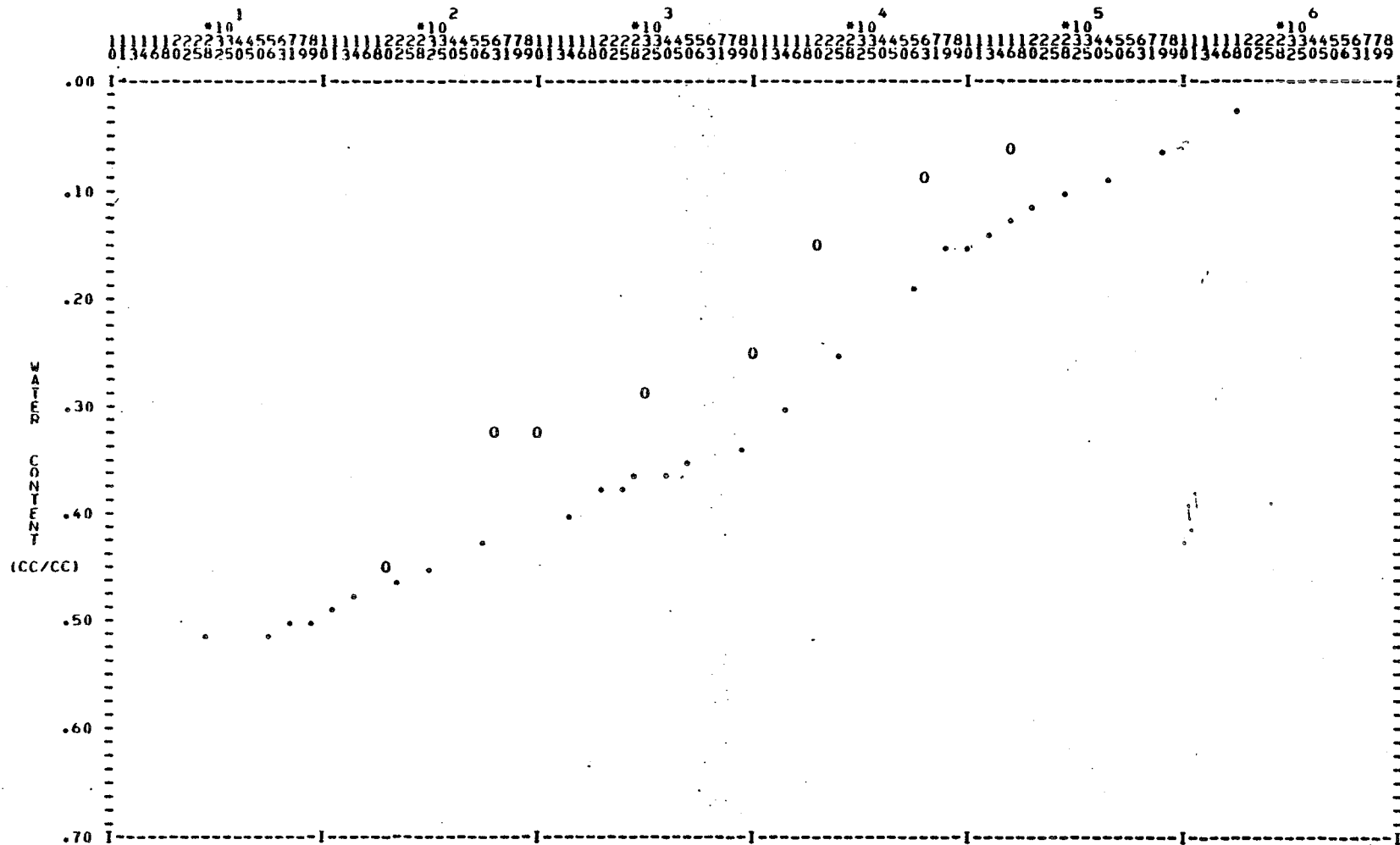
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.030	0.18364E+06
0.069	0.76894E+05
0.085	0.44377E+05
0.100	0.29231E+05
0.113	0.20882E+05
0.124	0.15758E+05
0.135	0.12369E+05
0.145	0.10000E+05
0.154	0.82777E+04
0.160	0.58974E+04
0.165	0.46071E+04
0.170	0.36600E+04
0.175	0.28575E+03
0.180	0.22755E+03
0.185	0.17913E+03
0.190	0.14288E+03
0.195	0.11066E+03
0.200	0.86201E+02
0.205	0.64235E+02
0.210	0.49415E+02
0.215	0.37315E+02
0.220	0.28494E+02
0.225	0.22113E+02
0.230	0.17113E+02
0.235	0.13066E+02
0.240	0.10000E+02
0.245	0.76894E+01
0.250	0.58974E+01
0.255	0.46071E+01
0.260	0.36600E+01
0.265	0.28575E+01
0.270	0.22755E+01
0.275	0.17913E+01
0.280	0.14288E+01
0.285	0.11066E+01
0.290	0.86201E+00
0.295	0.64235E+00
0.300	0.49415E+00
0.305	0.37315E+00
0.310	0.28494E+00
0.315	0.22113E+00
0.320	0.17113E+00
0.325	0.13066E+00
0.330	0.10000E+00
0.335	0.76894E-01
0.340	0.58974E-01
0.345	0.46071E-01
0.350	0.36600E-01
0.355	0.28575E-01
0.360	0.22755E-01
0.365	0.17913E-01
0.370	0.14288E-01
0.375	0.11066E-01
0.380	0.86201E-02
0.385	0.64235E-02
0.390	0.49415E-02
0.395	0.37315E-02
0.400	0.28494E-02
0.405	0.22113E-02
0.410	0.17113E-02
0.415	0.13066E-02
0.420	0.10000E-02
0.425	0.76894E-03
0.430	0.58974E-03
0.435	0.46071E-03
0.440	0.36600E-03
0.445	0.28575E-03
0.450	0.22755E-03
0.455	0.17913E-03
0.460	0.14288E-03
0.465	0.11066E-03
0.470	0.86201E-04
0.475	0.64235E-04
0.480	0.49415E-04
0.485	0.37315E-04
0.490	0.28494E-04
0.495	0.22113E-04
0.500	0.17113E-04
0.505	0.13066E-04
0.510	0.10000E-04
0.515	0.76894E-05
0.520	0.58974E-05
0.525	0.46071E-05
0.530	0.36600E-05
0.535	0.28575E-05
0.540	0.22755E-05
0.545	0.17913E-05
0.550	0.14288E-05
0.555	0.11066E-05
0.560	0.86201E-06
0.565	0.64235E-06
0.570	0.49415E-06
0.575	0.37315E-06
0.580	0.28494E-06
0.585	0.22113E-06
0.590	0.17113E-06
0.595	0.13066E-06
0.600	0.10000E-06
0.605	0.76894E-07
0.610	0.58974E-07
0.615	0.46071E-07
0.620	0.36600E-07
0.625	0.28575E-07
0.630	0.22755E-07
0.635	0.17913E-07
0.640	0.14288E-07
0.645	0.11066E-07
0.650	0.86201E-08
0.655	0.64235E-08
0.660	0.49415E-08
0.665	0.37315E-08
0.670	0.28494E-08
0.675	0.22113E-08
0.680	0.17113E-08
0.685	0.13066E-08
0.690	0.10000E-08
0.695	0.76894E-09
0.700	0.58974E-09
0.705	0.46071E-09
0.710	0.36600E-09
0.715	0.28575E-09
0.720	0.22755E-09
0.725	0.17913E-09
0.730	0.14288E-09
0.735	0.11066E-09
0.740	0.86201E-10
0.745	0.64235E-10
0.750	0.49415E-10
0.755	0.37315E-10
0.760	0.28494E-10
0.765	0.22113E-10
0.770	0.17113E-10
0.775	0.13066E-10
0.780	0.10000E-10
0.785	0.76894E-11
0.790	0.58974E-11
0.795	0.46071E-11
0.800	0.36600E-11
0.805	0.28575E-11
0.810	0.22755E-11
0.815	0.17913E-11
0.820	0.14288E-11
0.825	0.11066E-11
0.830	0.86201E-12
0.835	0.64235E-12
0.840	0.49415E-12
0.845	0.37315E-12
0.850	0.28494E-12
0.855	0.22113E-12
0.860	0.17113E-12
0.865	0.13066E-12
0.870	0.10000E-12
0.875	0.76894E-13
0.880	0.58974E-13
0.885	0.46071E-13
0.890	0.36600E-13
0.895	0.28575E-13
0.900	0.22755E-13
0.905	0.17913E-13
0.910	0.14288E-13
0.915	0.11066E-13
0.920	0.86201E-14
0.925	0.64235E-14
0.930	0.49415E-14
0.935	0.37315E-14
0.940	0.28494E-14
0.945	0.22113E-14
0.950	0.17113E-14
0.955	0.13066E-14
0.960	0.10000E-14
0.965	0.76894E-15
0.970	0.58974E-15
0.975	0.46071E-15
0.980	0.36600E-15
0.985	0.28575E-15
0.990	0.22755E-15
0.995	0.17913E-15
1.000	0.14288E-15

ALPHA = 1.38

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SOIL WATER PRESSURE ( PSI ) , -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 162

0 MEASURED :

. PREDICTED

SUM OF (ABS(LOG(PSIH)-LOG(PSIP))) = 0.58280E+01

SOIL HORIZON NUMBER 163 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.40 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.074	0.150E+05
0.101	0.600E+04
0.168	0.200E+04
0.266	0.100E+04
0.288	0.330E+03
0.316	0.100E+03
0.325	0.600E+02
0.423	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	7.3	0.073
2.00	12.7	0.054
3.00	16.5	0.038
4.00	19.8	0.033
5.00	22.7	0.029
6.00	25.4	0.026
7.00	27.7	0.024
8.00	29.9	0.021
9.00	31.8	0.020
10.00	33.7	0.018
20.00	46.9	0.132
30.00	59.3	0.124
40.00	68.6	0.093
50.00	72.7	0.041
60.00	74.2	0.015
70.00	75.4	0.012
80.00	76.5	0.011
90.00	77.4	0.009
100.00	78.3	0.009
200.00	84.1	0.058
300.00	87.7	0.036
400.00	90.5	0.028
500.00	92.7	0.022
600.00	94.5	0.018
700.00	95.9	0.015
800.00	97.1	0.012
900.00	98.1	0.009
1000.00	98.8	0.007
2000.00	100.0	0.012

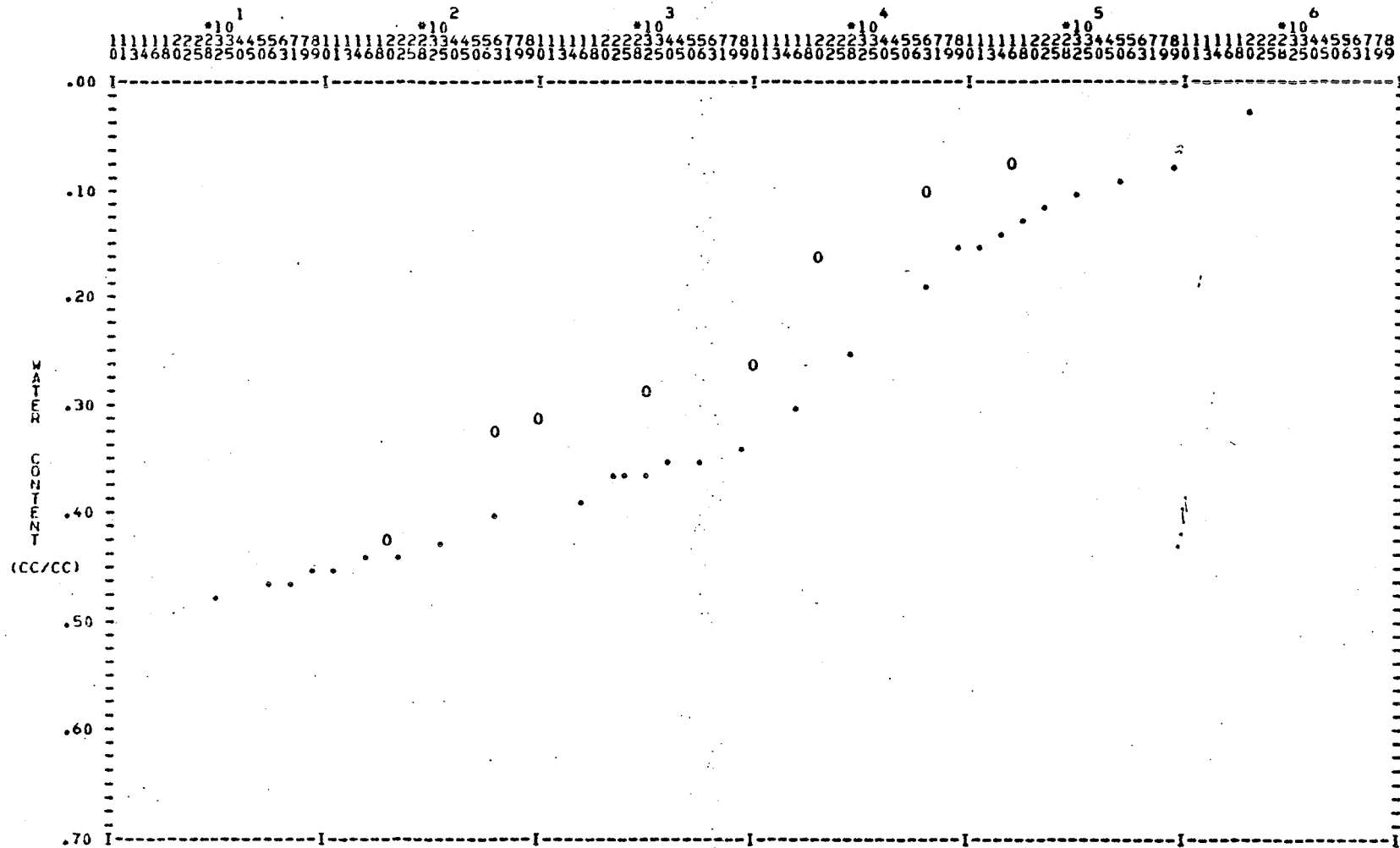
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.030	0.20743E+06
0.069	0.86769E+05
0.086	0.50011E+05
0.100	0.32912E+05
0.113	0.23496E+05
0.125	0.17720E+05
0.136	0.13902E+05
0.146	0.11237E+05
0.155	0.92956E+04
0.190	0.66134E+04
0.251	0.29300E+04
0.302	0.16352E+04
0.333	0.94316E+03
0.346	0.56939E+03
0.353	0.42104E+03
0.358	0.32680E+03
0.363	0.26289E+03
0.367	0.21731E+03
0.383	0.15209E+03
0.405	0.62321E+02
0.420	0.35125E+02
0.432	0.22536E+02
0.441	0.15780E+02
0.449	0.11721E+02
0.455	0.90002E+01
0.460	0.70821E+01
0.464	0.56726E+01
0.469	0.30365E+01

ALPHA = 1.38



SOIL WATER PRESSURE ( PSI ), 1-CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 163

0 MEASURED :

• PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.57469E+01

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SOIL HORIZON NUMBER 164 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.45 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.110	0.150E+05
0.142	0.600E+04
0.220	0.200E+04
0.303	0.100E+04
0.326	0.330E+03
0.344	0.100E+03
0.355	0.600E+02
0.400	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

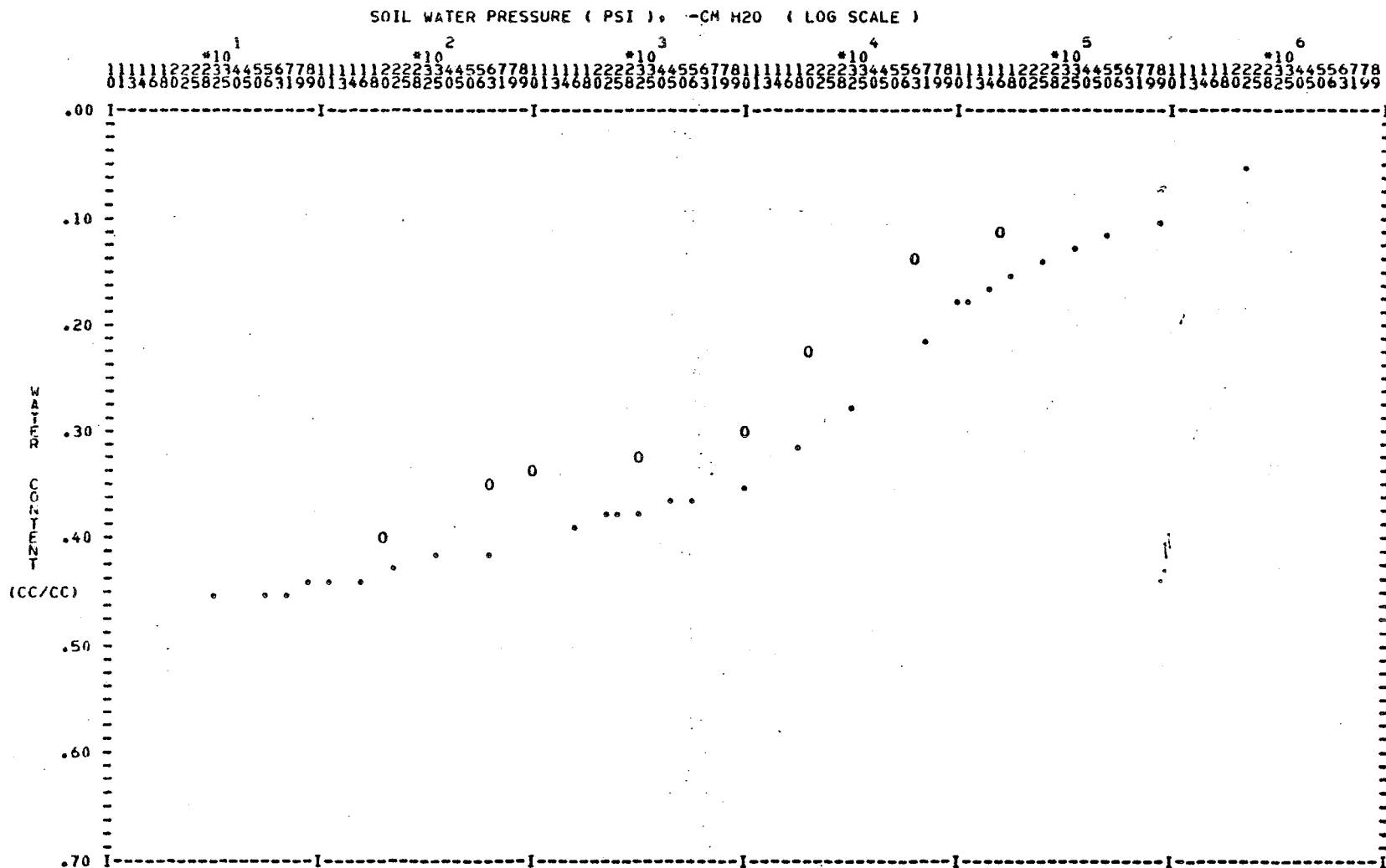
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	14.0	0.140
2.00	19.4	0.054
3.00	23.3	0.038
4.00	26.5	0.033
5.00	29.5	0.029
6.00	32.1	0.026
7.00	34.4	0.024
8.00	36.6	0.021
9.00	37.6	0.020
10.00	40.4	0.018
20.00	53.5	0.131
30.00	65.5	0.120
40.00	75.0	0.092
50.00	79.1	0.041
60.00	80.6	0.015
70.00	81.7	0.012
80.00	82.7	0.009
90.00	83.1	0.008
100.00	84.5	0.007
200.00	89.5	0.044
300.00	91.5	0.027
400.00	93.5	0.020
500.00	94.5	0.010
600.00	95.5	0.010
700.00	96.5	0.010
800.00	97.5	0.008
900.00	98.5	0.007
1000.00	99.0	0.005
2000.00	100.0	0.010

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.044	0.21556E+06
0.096	0.90172E+05
0.113	0.51964E+05
0.127	0.34190E+05
0.139	0.24403E+05
0.151	0.18401E+05
0.161	0.14434E+05
0.170	0.11664E+05
0.179	0.06480E+04
0.213	0.08596E+04
0.270	0.30368E+04
0.319	0.16957E+04
0.349	0.08040E+03
0.362	0.59256E+03
0.368	0.43336E+03
0.373	0.33220E+03
0.376	0.26384E+03
0.380	0.21542E+03
0.391	0.14968E+03
0.407	0.01117E+02
0.418	0.04011E+02
0.425	0.01831E+02
0.432	0.01531E+02
0.437	0.01136E+02
0.441	0.07356E+01
0.444	0.06983E+01
0.447	0.55581E+01
0.451	0.30466E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 164

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.53915E+01

SOIL HORIZON NUMBER 165 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.51 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.149	0.150E+05
0.140	0.600E+04
0.249	0.200E+04
0.319	0.100E+04
0.331	0.330E+03
0.343	0.100E+03
0.355	0.600E+02
0.396	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTER. AL FRACTION ( G/G )
1.00	18.3	0.183
0.00	33.0	0.049
0.00	56.7	0.035
0.00	59.8	0.032
0.00	60.6	0.028
0.00	60.6	0.025
0.00	67.7	0.023
0.00	69.5	0.021
0.00	71.4	0.019
0.00	73.2	0.018
0.00	76.5	0.015
0.00	78.3	0.009
0.00	82.8	0.005
0.00	84.8	0.003
0.00	85.8	0.001
0.00	86.8	0.000
0.00	87.5	0.000
0.00	88.1	0.000
0.00	91.8	0.000
0.00	94.0	0.000
0.00	95.6	0.000
0.00	96.8	0.000
0.00	97.7	0.000
0.00	98.4	0.000
0.00	98.9	0.000
0.00	99.0	0.000
0.00	99.5	0.000
0.00	100.0	0.000

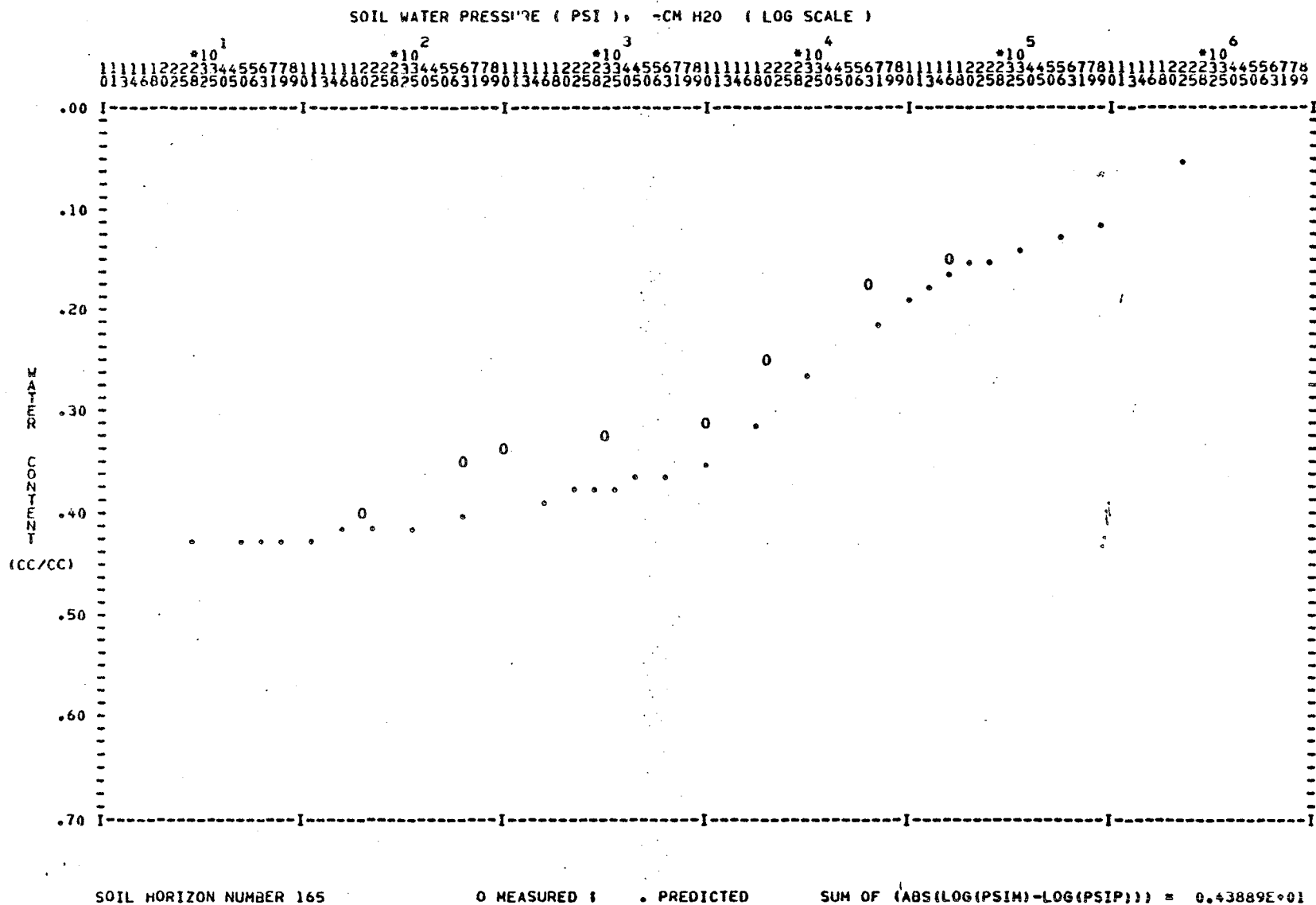
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.050	0.22135E+06
0.107	0.92951E+05
0.122	0.53803E+05
0.134	0.35482E+05
0.146	0.25363E+05
0.156	0.19145E+05
0.166	0.15030E+05
0.174	0.12155E+05
0.182	0.10059E+05
0.214	0.71659E+04
0.269	0.31910E+04
0.316	0.17897E+04
0.347	0.10433E+04
0.360	0.63761E+03
0.366	0.46036E+03
0.371	0.34822E+03
0.375	0.27286E+03
0.378	0.21985E+03
0.387	0.15193E+03
0.400	0.61729E+02
0.408	0.34198E+02
0.414	0.21931E+02
0.418	0.15226E+02
0.422	0.11054E+02
0.425	0.82994E+01
0.426	0.63627E+01
0.428	0.49192E+01
0.429	0.27962E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 166 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.84 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.121	0.150E+05
0.145	0.600E+04
0.190	0.200E+04
0.243	0.100E+04
0.258	0.330E+03
0.265	0.100E+03
0.272	0.600E+02
0.296	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	13.3	0.133
2.00	16.2	0.029
3.00	18.3	0.021
4.00	20.3	0.020
5.00	22.2	0.018
6.00	23.9	0.017
7.00	25.4	0.016
8.00	26.9	0.015
9.00	28.3	0.014
10.00	29.5	0.013
20.00	39.4	0.099
30.00	49.4	0.100
40.00	57.5	0.081
50.00	61.8	0.043
60.00	63.8	0.020
70.00	65.3	0.014
80.00	66.5	0.012
90.00	67.7	0.012
100.00	69.0	0.013
200.00	78.2	0.092
300.00	83.5	0.053
400.00	87.2	0.037
500.00	90.0	0.028
600.00	92.2	0.022
700.00	93.9	0.017
800.00	95.3	0.014
900.00	96.4	0.011
1000.00	97.3	0.009
2000.00	100.0	0.027

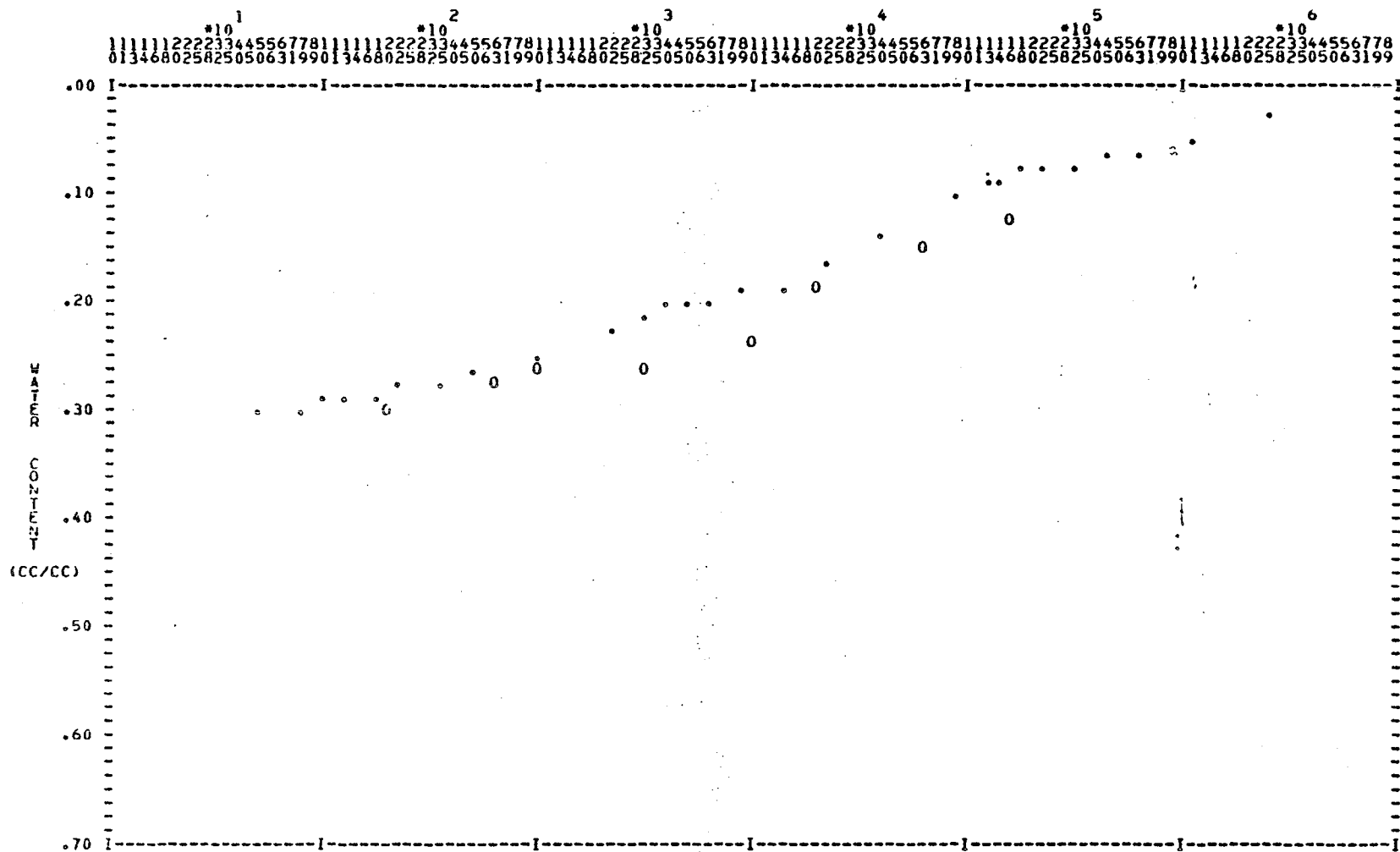
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.025	0.26209E+06
0.053	0.11072E+06
0.059	0.64648E+05
0.065	0.42896E+05
0.070	0.30810E+05
0.075	0.23350E+05
0.080	0.18394E+05
0.084	0.14919E+05
0.088	0.12380E+05
0.105	0.89082E+04
0.136	0.40072E+04
0.163	0.22672E+04
0.182	0.13557E+04
0.192	0.85745E+03
0.197	0.61863E+03
0.201	0.46024E+03
0.205	0.39293E+03
0.209	0.33276E+03
0.225	0.23648E+03
0.247	0.95494E+02
0.261	0.52600E+02
0.271	0.33735E+02
0.278	0.23493E+02
0.285	0.17216E+02
0.289	0.13156E+02
0.293	0.10371E+02
0.296	0.83748E+01
0.302	0.50449E+01

ALPHA = 1.38

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SOIL WATER PRESSURE ( PSI ) -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 166

0 MEASURED :

0 PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.37002E+01

SOIL HORIZON NUMRER 167 ( SEE TABLE 4 FOR IDENTIFICATION )

# DENSITY DATA:

BULK DENSITY = 1.80 G/CM\*\*3  
 PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

# MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.088	0.150E+05
0.112	0.600E+04
0.160	0.200E+04
0.193	0.100E+04
0.207	0.330E+03
0.220	0.100E+03
0.232	0.600E+02
0.281	0.200E+02

# PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	0.113	0.003
2.00	0.003	0.003
3.00	0.003	0.003
4.00	0.003	0.003
5.00	0.003	0.003
6.00	0.003	0.003
7.00	0.003	0.003
8.00	0.003	0.003
9.00	0.003	0.003
10.00	0.003	0.003
20.00	0.018	0.003
30.00	0.021	0.003
40.00	0.018	0.003
50.00	0.018	0.003
60.00	0.018	0.003
70.00	0.020	0.003
80.00	0.031	0.003
90.00	0.023	0.003
100.00	0.024	0.003
200.00	0.233	0.003
300.00	0.110	0.003
400.00	0.069	0.003
500.00	0.053	0.003
600.00	0.044	0.003
700.00	0.036	0.003
800.00	0.031	0.003
900.00	0.027	0.003
1000.00	0.023	0.003
2000.00	100.0	0.061

# PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

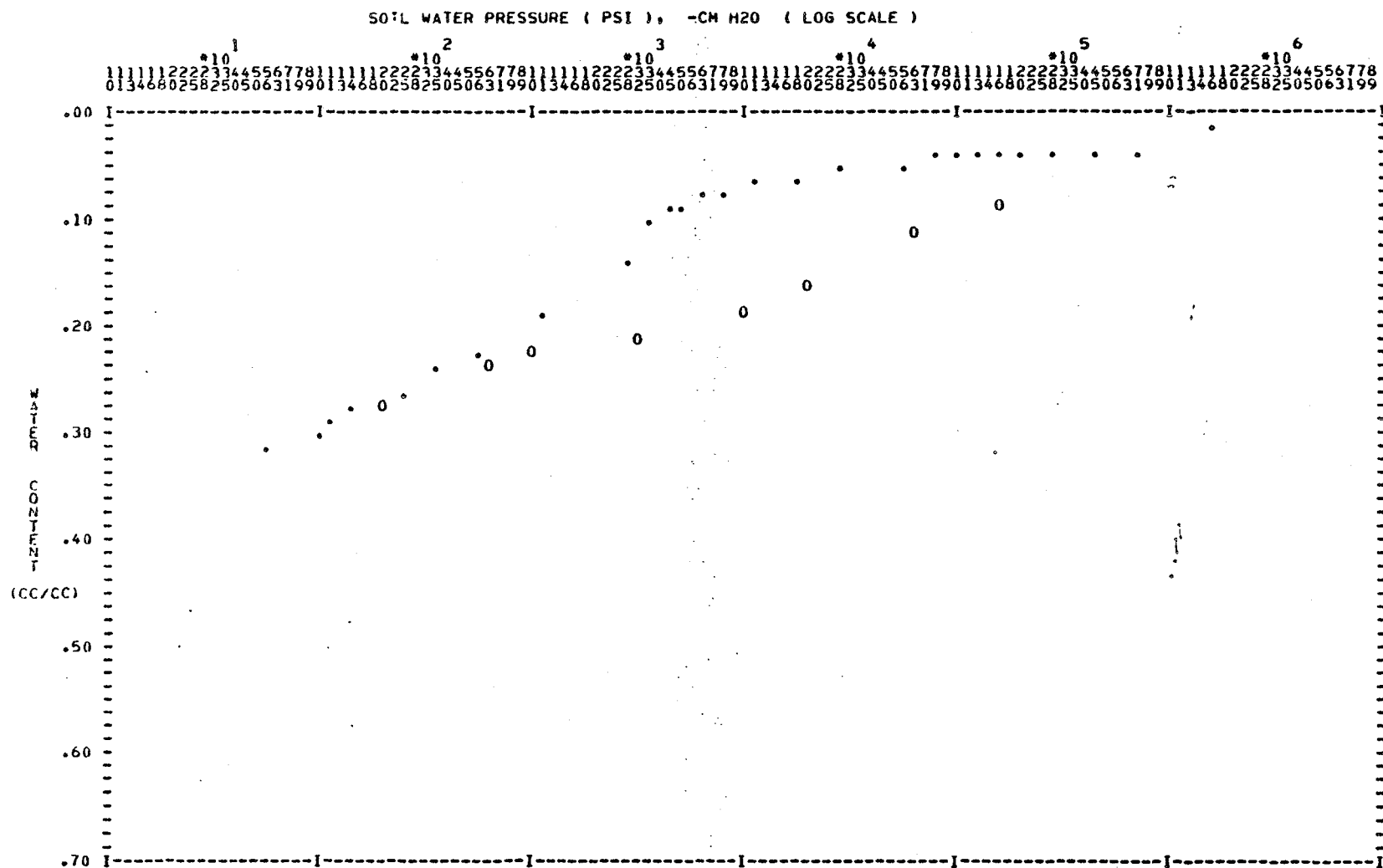
0.019	0.16059E+06
0.038	0.71734E+05
0.039	0.43466E+05
0.039	0.29107E+05
0.040	0.20952E+05
0.041	0.15871E+05
0.042	0.12482E+05
0.043	0.10102E+05
0.043	0.83626E+04
0.046	0.59387E+04
0.051	0.27963E+04
0.057	0.16925E+04
0.064	0.11093E+04
0.069	0.80529E+03
0.075	0.63354E+03
0.082	0.5141E+03
0.089	0.42717E+03
0.096	0.36161E+03
0.137	0.27257E+03
0.193	0.10605E+03
0.221	0.57240E+02
0.241	0.36690E+02
0.256	0.25749E+02
0.269	0.19160E+02
0.280	0.14850E+02
0.289	0.11867E+02
0.297	0.97121E+01
0.311	0.56868E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 168 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 0.94 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.076	0.150E+05
0.107	0.600E+04
0.155	0.200E+04
0.342	0.100E+04
0.349	0.330E+03
0.433	0.100E+03
0.473	0.600E+02
0.555	0.200E+02

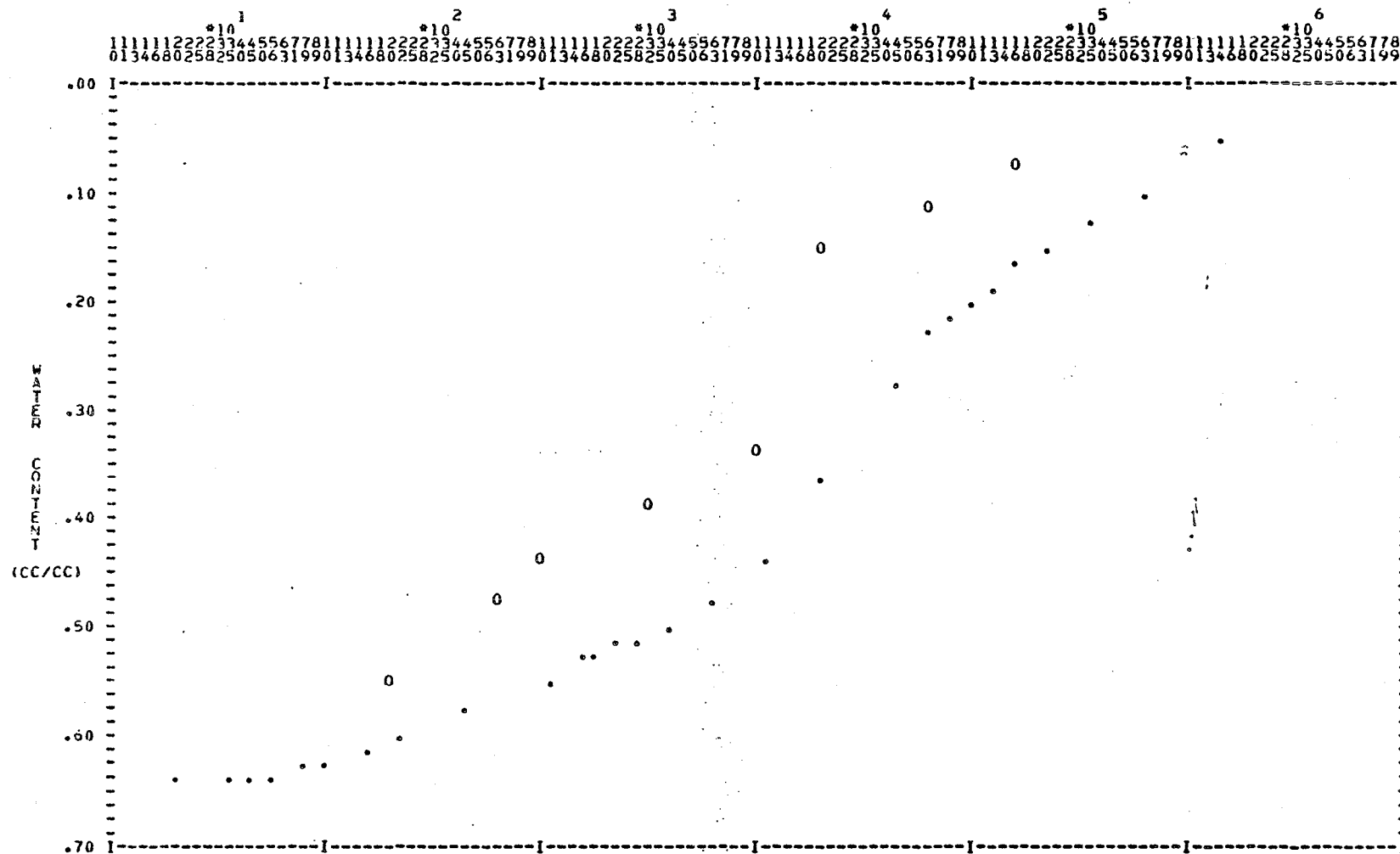
PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	9.3	0.093
2.00	18.3	0.093
3.00	27.3	0.093
4.00	36.3	0.093
5.00	45.3	0.093
6.00	54.3	0.093
7.00	63.3	0.093
8.00	72.3	0.093
9.00	81.3	0.093
10.00	90.3	0.093
20.00	90.3	0.093
30.00	90.3	0.093
40.00	90.3	0.093
50.00	90.3	0.093
60.00	90.3	0.093
70.00	90.3	0.093
80.00	90.3	0.093
90.00	90.3	0.093
100.00	90.3	0.093
200.00	90.3	0.093
300.00	90.3	0.093
400.00	90.3	0.093
500.00	90.3	0.093
600.00	90.3	0.093
700.00	90.3	0.093
800.00	90.3	0.093
900.00	90.3	0.093
1000.00	90.3	0.093
2000.00	100.0	0.007

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.047	0.14463E+06
0.106	0.60622E+05
0.129	0.35022E+05
0.149	0.23077E+05
0.167	0.16448E+05
0.184	0.12444E+05
0.198	0.97655E+04
0.212	0.78955E+04
0.224	0.65333E+04
0.235	0.56533E+04
0.247	0.46533E+04
0.260	0.32071E+04
0.273	0.11154E+04
0.286	0.66599E+03
0.299	0.66599E+03
0.311	0.66599E+03
0.323	0.66599E+03
0.335	0.66599E+03
0.347	0.66599E+03
0.359	0.66599E+03
0.371	0.66599E+03
0.383	0.66599E+03
0.395	0.66599E+03
0.407	0.66599E+03
0.419	0.66599E+03
0.431	0.66599E+03
0.443	0.66599E+03
0.455	0.66599E+03
0.467	0.66599E+03
0.479	0.66599E+03
0.491	0.66599E+03
0.503	0.66599E+03
0.515	0.66599E+03
0.527	0.66599E+03
0.539	0.66599E+03
0.551	0.66599E+03
0.563	0.66599E+03
0.575	0.66599E+03
0.587	0.66599E+03
0.599	0.66599E+03
0.611	0.66599E+03
0.623	0.66599E+03
0.635	0.66599E+03
0.647	0.66599E+03
0.659	0.66599E+03
0.671	0.66599E+03
0.683	0.66599E+03
0.695	0.66599E+03
0.707	0.66599E+03
0.719	0.66599E+03
0.731	0.66599E+03
0.743	0.66599E+03
0.755	0.66599E+03
0.767	0.66599E+03
0.779	0.66599E+03
0.791	0.66599E+03
0.803	0.66599E+03
0.815	0.66599E+03
0.827	0.66599E+03
0.839	0.66599E+03
0.851	0.66599E+03
0.863	0.66599E+03
0.875	0.66599E+03
0.887	0.66599E+03
0.899	0.66599E+03
0.911	0.66599E+03
0.923	0.66599E+03
0.935	0.66599E+03
0.947	0.66599E+03
0.959	0.66599E+03
0.971	0.66599E+03
0.983	0.66599E+03
0.995	0.66599E+03
1.007	0.66599E+03
1.019	0.66599E+03
1.031	0.66599E+03
1.043	0.66599E+03
1.055	0.66599E+03
1.067	0.66599E+03
1.079	0.66599E+03
1.091	0.66599E+03
1.103	0.66599E+03
1.115	0.66599E+03
1.127	0.66599E+03
1.139	0.66599E+03
1.151	0.66599E+03
1.163	0.66599E+03
1.175	0.66599E+03
1.187	0.66599E+03
1.199	0.66599E+03
1.211	0.66599E+03
1.223	0.66599E+03
1.235	0.66599E+03
1.247	0.66599E+03
1.259	0.66599E+03
1.271	0.66599E+03
1.283	0.66599E+03
1.295	0.66599E+03
1.307	0.66599E+03
1.319	0.66599E+03
1.331	0.66599E+03
1.343	0.66599E+03
1.355	0.66599E+03
1.367	0.66599E+03
1.379	0.66599E+03
1.391	0.66599E+03
1.403	0.66599E+03
1.415	0.66599E+03
1.427	0.66599E+03
1.439	0.66599E+03
1.451	0.66599E+03
1.463	0.66599E+03
1.475	0.66599E+03
1.487	0.66599E+03
1.499	0.66599E+03
1.511	0.66599E+03
1.523	0.66599E+03
1.535	0.66599E+03
1.547	0.66599E+03
1.559	0.66599E+03
1.571	0.66599E+03
1.583	0.66599E+03
1.595	0.66599E+03
1.607	0.66599E+03
1.619	0.66599E+03
1.631	0.66599E+03
1.643	0.66599E+03
1.655	0.66599E+03
1.667	0.66599E+03
1.679	0.66599E+03
1.691	0.66599E+03
1.703	0.66599E+03
1.715	0.66599E+03
1.727	0.66599E+03
1.739	0.66599E+03
1.751	0.66599E+03
1.763	0.66599E+03
1.775	0.66599E+03
1.787	0.66599E+03
1.799	0.66599E+03
1.811	0.66599E+03
1.823	0.66599E+03
1.835	0.66599E+03
1.847	0.66599E+03
1.859	0.66599E+03
1.871	0.66599E+03
1.883	0.66599E+03
1.895	0.66599E+03
1.907	0.66599E+03
1.919	0.66599E+03
1.931	0.66599E+03
1.943	0.66599E+03
1.955	0.66599E+03
1.967	0.66599E+03
1.979	0.66599E+03
1.991	0.66599E+03
2.003	0.66599E+03
2.015	0.66599E+03
2.027	0.66599E+03
2.039	0.66599E+03
2.051	0.66599E+03
2.063	0.66599E+03
2.075	0.66599E+03
2.087	0.66599E+03
2.099	0.66599E+03
2.111	0.66599E+03
2.123	0.66599E+03
2.135	0.66599E+03
2.147	0.66599E+03
2.159	0.66599E+03
2.171	0.66599E+03
2.183	0.66599E+03
2.195	0.66599E+03
2.207	0.66599E+03
2.219	0.66599E+03
2.231	0.66599E+03
2.243	0.66599E+03
2.255	0.66599E+03
2.267	0.66599E+03
2.279	0.66599E+03
2.291	0.66599E+03
2.303	0.66599E+03
2.315	0.66599E+03
2.327	0.66599E+03
2.339	0.66599E+03
2.351	0.66599E+03
2.363	0.66599E+03
2.375	0.66599E+03
2.387	0.66599E+03
2.399	0.66599E+03
2.411	0.66599E+03
2.423	0.66599E+03
2.435	0.66599E+03
2.447	0.66599E+03
2.459	0.66599E+03
2.471	0.66599E+03
2.483	0.66599E+03
2.495	0.66599E+03
2.507	0.66599E+03
2.519	0.66599E+03
2.531	0.66599E+03
2.543	0.66599E+03
2.555	0.66599E+03
2.567	0.66599E+03
2.579	0.66599E+03
2.591	0.66599E+03
2.603	0.66599E+03
2.615	0.66599E+03
2.627	0.66599E+03
2.639	0.66599E+03
2.651	0.66599E+03
2.663	0.66599E+03
2.675	0.66599E+03
2.687	0.66599E+03
2.699	0.66599E+03
2.711	0.66599E+03
2.723	0.66599E+03
2.735	0.66599E+03
2.747	0.66599E+03
2.759	0.66599E+03
2.771	0.66599E+03
2.783	0.66599E+03
2.795	0.66599E+03
2.807	0.66599E+03
2.819	0.66599E+03
2.831	0.66599E+03
2.843	0.66599E+03
2.855	0.66599E+03
2.867	0.66599E+03
2.879	0.66599E+03
2.891	0.66599E+03
2.903	0.66599E+03
2.915	0.66599E+03
2.927	0.66599E+03
2.939	0.66599E+03
2.951	0.66599E+03
2.963	0.66599E+03
2.975	0.66599E+03
2.987	0.66599E+03
2.999	0.66599E+03
3.011	0.66599E+03
3.023	0.66599E+03
3.035	0.66599E+03
3.047	0.66599E+03
3.059	0.66599E+03
3.071	0.66599E+03
3.083	0.66599E+03
3.095	0.66599E+03
3.107	0.66599E+03
3.119	0.66599E+03
3.131	0.66599E+03
3.143	0.66599E+03
3.155	0.66599E+03
3.167	0.66599E+03
3.179	0.66599E+03
3.191	0.66599E+03
3.203	0.66599E+03
3.215	0.66599E+03
3.227	0.66599E+03
3.239	0.66599E+03
3.251	0.66599E+03
3.263	0.66599E+03
3.275	0.66599E+03
3.287	0.66599E+03
3.299	0.66599E+03
3.311	0.66599E+03
3.323	0.66599E+03
3.335	0.66599E+03
3.347	0.66599E+03
3.359	0.66599E+03
3.371	0.66599E+03
3.383	0.66599E+03
3.395	0.66599E+03
3.407	0.66599E+03
3.419	0.66599E+03
3.431	0.66599E+03
3.443	0.66599E+03
3.455	0.66599E+03
3.467	0.66599E+03
3.479	0.66599E+03
3.491	0.66599E+03
3.503	0.66599E+03
3.515	0.66599E+03
3.527	0.66599E+03
3.539	0.66599E+03
3.551	0.66599E+03
3.563	0.66599E+03
3.575	0.66599E+03
3.587	0.66599E+03
3.599	0.66599E+03
3.611	0.66599E+03
3.623	0.66599E+03
3.635	0.66599E+03
3.647	0.66599E+03
3.659	0.66599E+03
3.671	0.66599E+03
3.683	0.66599E+03
3.695	0.66599E+03
3.707	0.66599E+03
3.719	0.66599E+03
3.731	0.66599E+03
3.743	0.66599E+03
3.755	0.66599E+03
3.767	0.66599E+03
3.779	0.66599E+03
3.791	0.66599E+03
3.803	0.66599E+03
3.815	0.66599E+03
3.827	0.66599E+03
3.839	0.66599E+03
3.851	0.66599E+03
3.863	0.66599E+03
3.875	0.66599E+03
3.887	0.66599E+03
3.899	0.66599E+03
3.911	0.66599E+03
3.923	0.66599E+03
3.935	0.66599E+03
3.947	0.66599E+03
3.959	0.66599E+03
3.971	0.66599E+03
3.983	0.66599E+03
3.995	0.66599E+03
4.007	0.66599E+03
4.019	0.66599E+03
4.031	0.66599E+03
4.043	0.66599E+03
4.055	0.66599E+03
4.067	0.66599E+03
4.079	0.66599E+03
4.091	0.66599E+03
4.103	0.66599E+03
4.115	0.66599E+03
4.127	0.66599E+03
4.139	0.66599E+03
4.151	0.66599E+03
4.163	0.66599E+03
4.175	0.66599E+03
4.187	0.66599E+03
4.199	0.66599E+03
4.211	0.665

SOIL WATER PRESSURE ( PSI ) , -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 168

0 MEASURED :

X PREDICTED

SUM OF (ABS(LOG(P<sub>SM</sub>)-LOG(P<sub>SP</sub>))) = 0.6677E+01

SOIL HORIZON NUMBER 169 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.21 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.068	0.150E+05
0.102	0.600E+04
0.166	0.200E+04
0.269	0.100E+04
0.301	0.330E+03
0.327	0.100E+03
0.341	0.600E+02
0.453	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	8.8	0.088
2.00	13.2	0.044
3.00	16.4	0.032
4.00	19.3	0.030
5.00	22.0	0.027
6.00	24.4	0.024
7.00	26.6	0.022
8.00	28.7	0.020
9.00	30.6	0.019
10.00	32.3	0.018
20.00	45.5	0.132
30.00	58.7	0.132
40.00	69.0	0.103
50.00	73.9	0.049
60.00	76.0	0.021
70.00	77.7	0.017
80.00	79.0	0.013
90.00	80.1	0.011
100.00	81.1	0.010
200.00	87.3	0.062
300.00	90.8	0.035
400.00	93.2	0.023
500.00	94.9	0.017
600.00	96.2	0.013
700.00	97.2	0.010
800.00	98.0	0.007
900.00	98.5	0.005
1000.00	98.9	0.004
2000.00	100.0	0.011

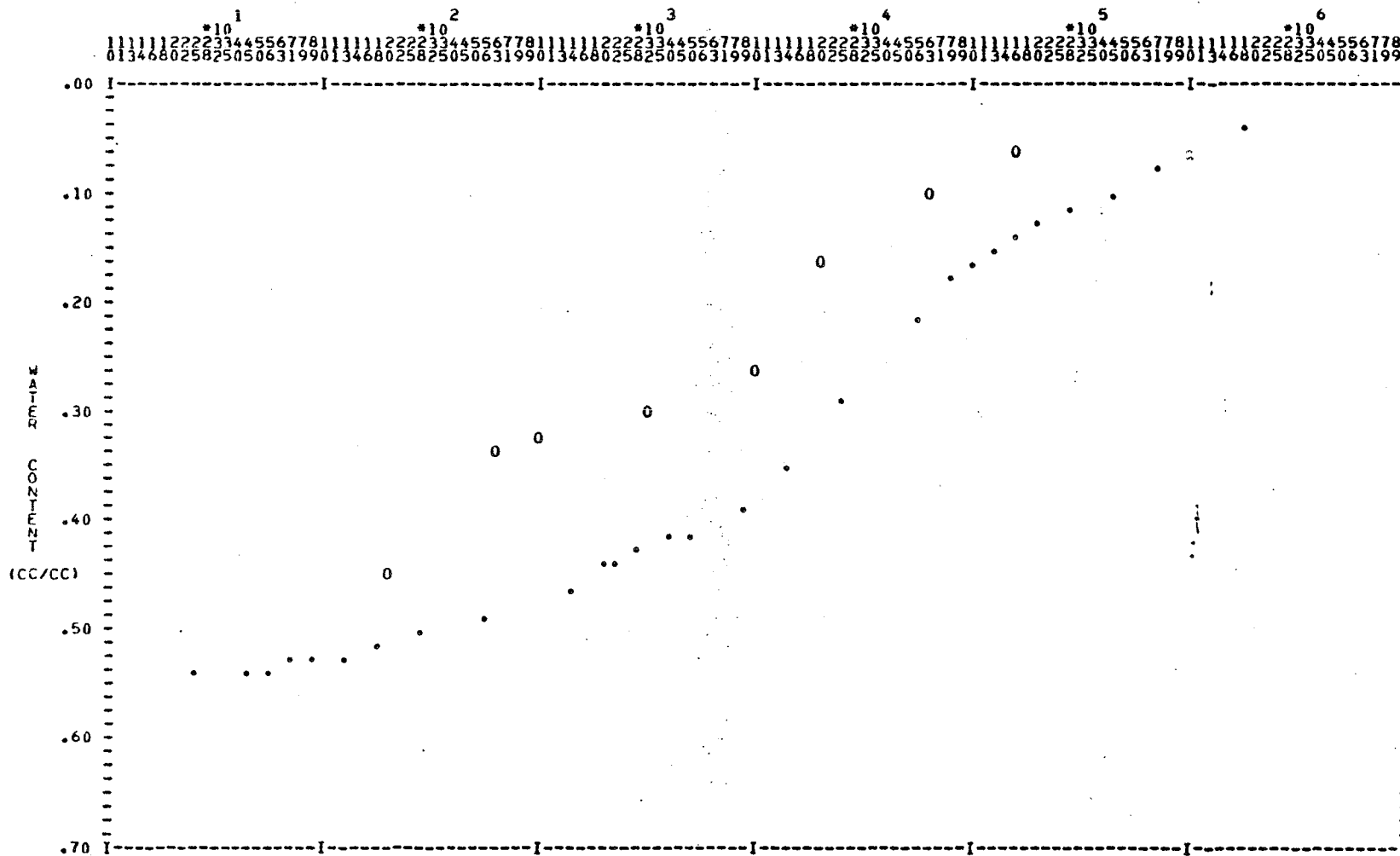
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.036	0.17268E+06
0.080	0.72776E+05
0.097	0.42322E+05
0.112	0.27993E+05
0.126	0.20054E+05
0.139	0.15164E+05
0.150	0.11923E+05
0.161	0.96543E+04
0.171	0.79993E+04
0.211	0.57228E+04
0.281	0.25674E+04
0.347	0.14443E+04
0.388	0.84547E+03
0.407	0.52521E+03
0.417	0.38599E+03
0.426	0.29660E+03
0.433	0.23566E+03
0.438	0.16217E+03
0.458	0.13370E+03
0.484	0.93681E+02
0.500	0.79245E+02
0.511	0.18680E+02
0.519	0.12957E+02
0.526	0.94278E+01
0.530	0.71227E+01
0.534	0.55244E+01
0.536	0.43608E+01
0.540	0.25870E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )

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SOIL HORIZON NUMBER 170 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.42 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.088	0.150E+05
0.126	0.600E+04
0.200	0.200E+04
0.284	0.100E+04
0.302	0.330E+03
0.317	0.100E+03
0.324	0.600E+02
0.382	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	12.4	0.124
2.00	16.8	0.044
3.00	19.9	0.031
4.00	22.8	0.029
5.00	25.5	0.026
6.00	27.8	0.024
7.00	30.0	0.022
8.00	32.0	0.020
9.00	33.8	0.018
10.00	35.6	0.017
20.00	48.4	0.128
30.00	61.0	0.126
40.00	70.9	0.099
50.00	75.8	0.049
60.00	78.0	0.022
70.00	79.6	0.017
80.00	81.0	0.013
90.00	82.0	0.011
100.00	82.9	0.009
200.00	88.5	0.056
300.00	91.5	0.030
400.00	93.5	0.020
500.00	95.0	0.015
600.00	96.2	0.012
700.00	97.1	0.009
800.00	97.8	0.007
900.00	98.4	0.006
1000.00	98.8	0.004
2000.00	100.0	0.012

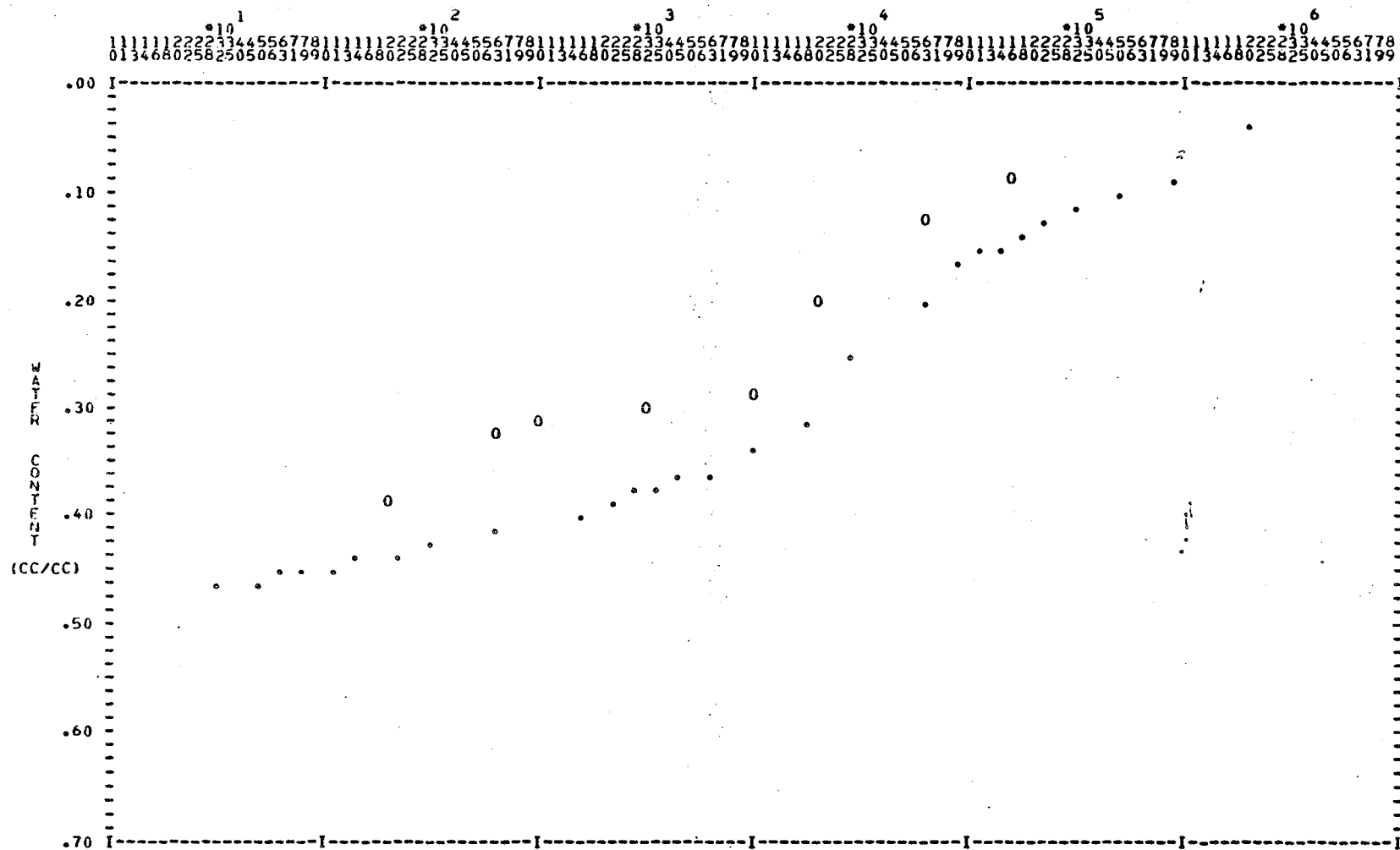
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.039	0.20212E+06
0.085	0.85103E+05
0.099	0.49442E+05
0.112	0.32687E+05
0.124	0.23411E+05
0.134	0.17700E+05
0.144	0.13914E+05
0.153	0.11266E+05
0.161	0.93338E+04
0.195	0.66762E+04
0.254	0.29853E+04
0.306	0.16799E+04
0.341	0.98941E+03
0.357	0.62011E+03
0.366	0.45283E+03
0.373	0.34579E+03
0.378	0.27306E+03
0.383	0.22133E+03
0.398	0.15353E+03
0.418	0.61152E+02
0.429	0.33350E+02
0.437	0.21278E+02
0.444	0.14828E+02
0.449	0.10888E+02
0.452	0.83025E+01
0.455	0.65072E+01
0.458	0.52036E+01
0.461	0.30829E+01

ALPHA = 1.38

# SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 170

O MEASURED

• PREDICTED

SUM OF (ABS(LOG(PSIH)-LOG(PSIP))) = 0.63607E+01

SOIL HORIZON NUMBER 171 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.56 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.131	0.150E+05
0.175	0.600E+04
0.220	0.200E+04
0.287	0.100E+04
0.306	0.330E+03
0.323	0.100E+03
0.345	0.600E+02
0.381	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	18.1	0.181
2.00	21.4	0.033
3.00	23.8	0.024
4.00	26.1	0.023
5.00	28.3	0.021
6.00	30.2	0.020
7.00	32.0	0.018
8.00	33.7	0.017
9.00	35.3	0.016
10.00	36.7	0.015
20.00	48.0	0.113
30.00	59.9	0.119
40.00	69.4	0.095
50.00	74.1	0.047
60.00	76.3	0.022
70.00	78.0	0.017
80.00	79.4	0.014
90.00	80.6	0.012
100.00	81.6	0.010
200.00	88.1	0.065
300.00	91.4	0.033
400.00	93.4	0.020
500.00	94.9	0.015
600.00	96.0	0.011
700.00	96.9	0.009
800.00	97.6	0.007
900.00	98.2	0.006
1000.00	98.6	0.004
2000.00	100.0	0.014

PREDICTED MOISTURE CHARACTERISTIC DATA

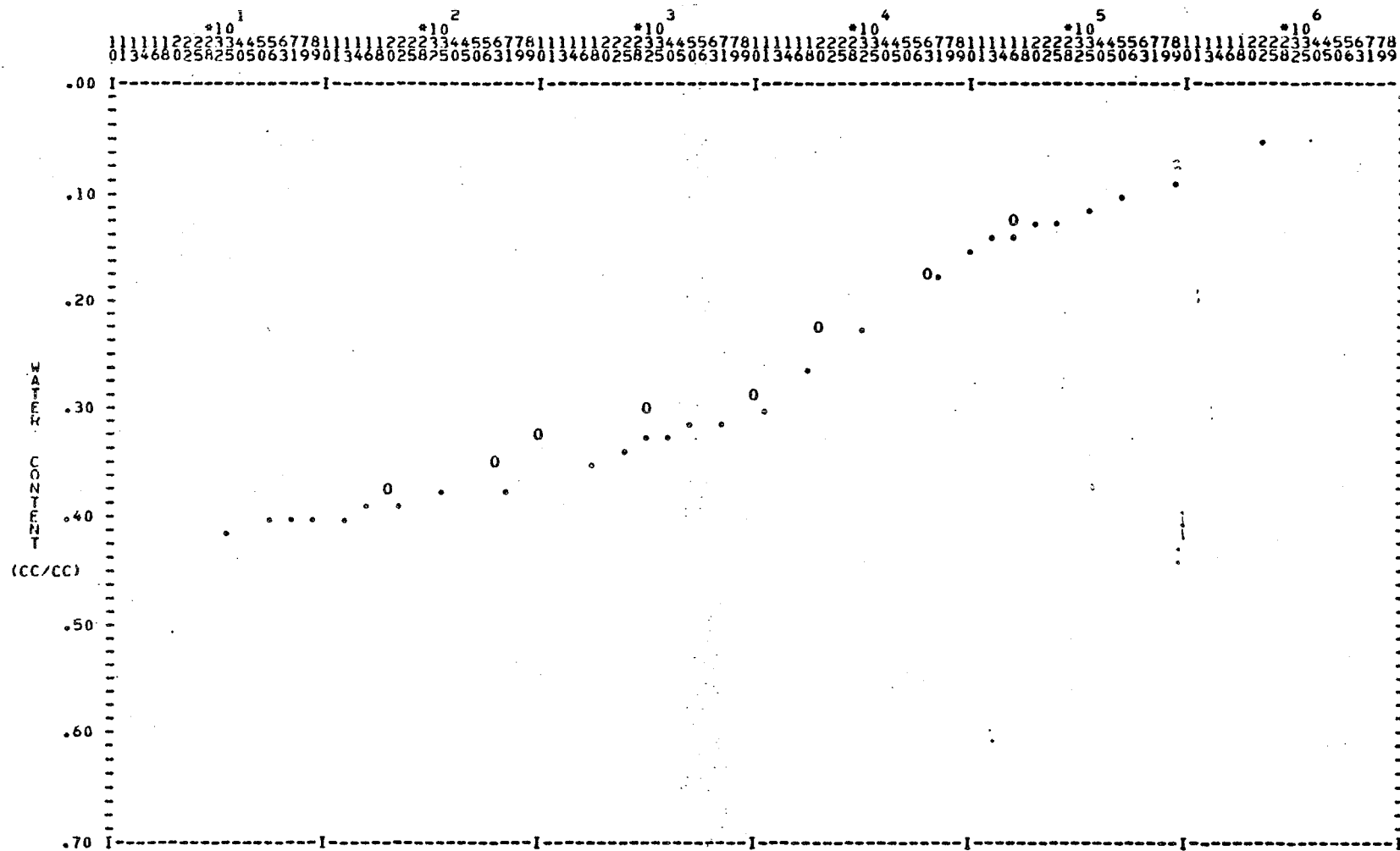
SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.044	0.21291E+06
0.093	0.90135E+05
0.103	0.52717E+05
0.112	0.34990E+05
0.120	0.25130E+05
0.128	0.19041E+05
0.135	0.14996E+05
0.142	0.12160E+05
0.148	0.10088E+05
0.174	0.72505E+04
0.222	0.32839E+04
0.266	0.18566E+04
0.295	0.10955E+04
0.309	0.69023E+03
0.317	0.50783E+03
0.324	0.39037E+03
0.330	0.31008E+03
0.334	0.25268E+03
0.349	0.17577E+03
0.369	0.69414E+02
0.380	0.37245E+02
0.387	0.23579E+02
0.393	0.16403E+02
0.397	0.12047E+02
0.400	0.91954E+01
0.403	0.72206E+01
0.405	0.57910E+01
0.408	0.35346E+01

ALPHA = 1.38

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SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 171

0 MEASURED :      . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.22138E+01

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SOIL HORIZON NUMBER 172 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.82 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.091	0.150E+05
0.120	0.600E+04
0.164	0.200E+04
0.207	0.100E+04
0.229	0.330E+03
0.246	0.100E+03
0.251	0.800E+02
0.289	0.200E+02

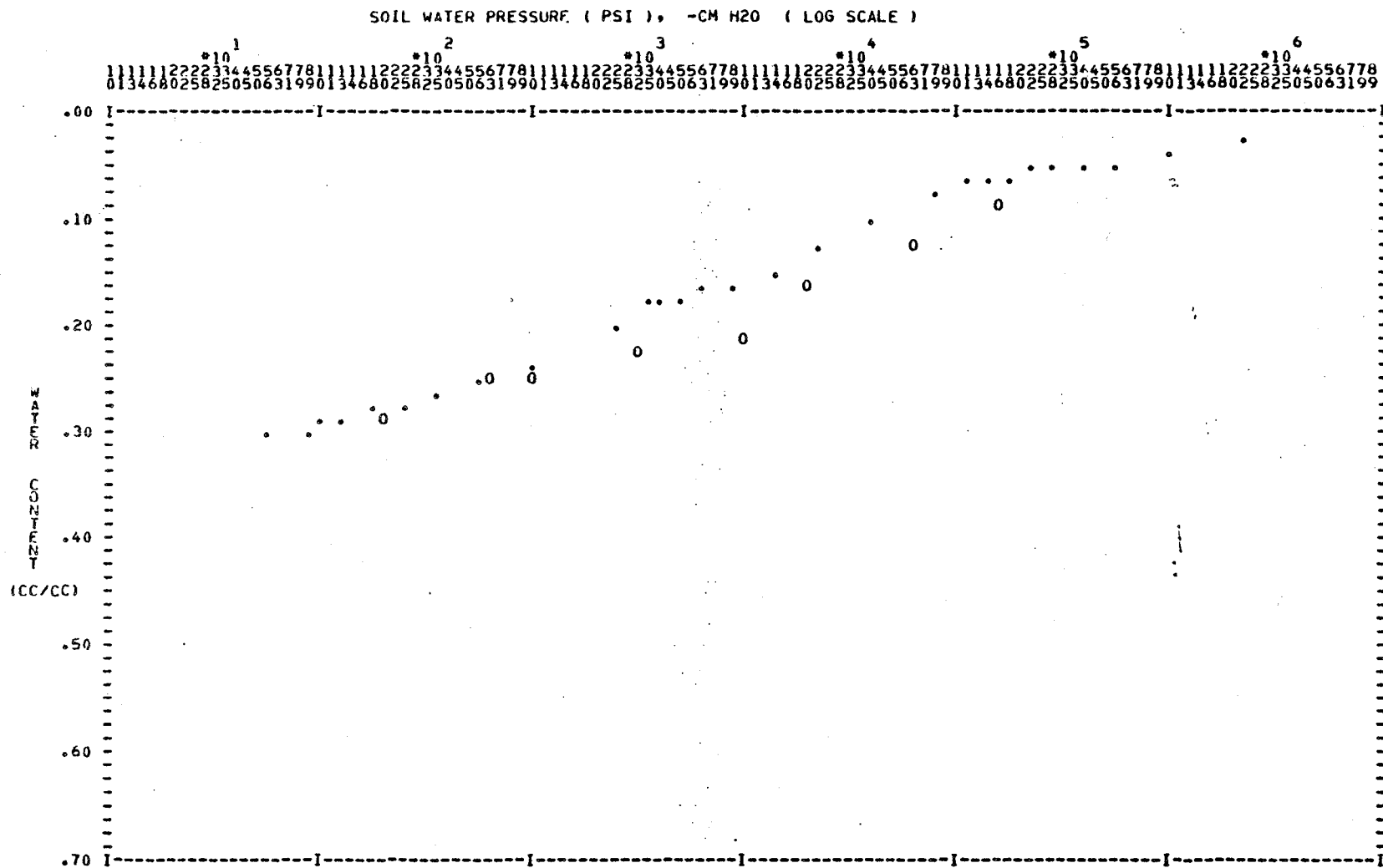
PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	10.7	0.107
2.00	12.3	0.016
3.00	13.5	0.012
4.00	14.8	0.013
5.00	15.9	0.011
6.00	17.1	0.011
7.00	18.1	0.010
8.00	19.3	0.010
9.00	20.2	0.009
10.00	21.1	0.009
20.00	27.0	0.059
30.00	37.7	0.087
40.00	43.1	0.054
50.00	51.3	0.082
60.00	59.3	0.080
70.00	65.5	0.062
80.00	72.7	0.072
90.00	78.8	0.061
100.00	80.7	0.019
200.00	82.0	0.013
300.00	86.1	0.041
400.00	88.7	0.026
500.00	90.0	0.013
600.00	92.0	0.020
700.00	93.3	0.013
800.00	94.0	0.007
900.00	94.6	0.006
1000.00	94.6	0.000
2000.00	100.0	0.054

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.019	0.23138E+06
0.040	0.98105E+05
0.044	0.57846E+05
0.048	0.38726E+05
0.053	0.28022E+05
0.055	0.21365E+05
0.058	0.16922E+05
0.063	0.13785E+05
0.065	0.11485E+05
0.078	0.83874E+04
0.104	0.38314E+04
0.130	0.21391E+04
0.144	0.11392E+04
0.160	0.86689E+03
0.180	0.63314E+03
0.200	0.48055E+03
0.220	0.34032E+03
0.240	0.24660E+03
0.260	0.20014E+03
0.280	0.15439E+03
0.300	0.11392E+03
0.320	0.86689E+02
0.340	0.63314E+02
0.360	0.48055E+02
0.380	0.34032E+02
0.400	0.24660E+02
0.420	0.20014E+02
0.440	0.15439E+02
0.460	0.11392E+02
0.480	0.86689E+01
0.500	0.63314E+01
0.520	0.48055E+01
0.540	0.34032E+01
0.560	0.24660E+01
0.580	0.20014E+01
0.600	0.15439E+01
0.620	0.11392E+01
0.640	0.86689E+00
0.660	0.63314E+00
0.680	0.48055E+00
0.700	0.34032E+00
0.720	0.24660E+00
0.740	0.20014E+00
0.760	0.15439E+00
0.780	0.11392E+00
0.800	0.86689E-01
0.820	0.63314E-01
0.840	0.48055E-01
0.860	0.34032E-01
0.880	0.24660E-01
0.900	0.20014E-01
0.920	0.15439E-01
0.940	0.11392E-01
0.960	0.86689E-02
0.980	0.63314E-02
1.000	0.48055E-02
1.020	0.34032E-02
1.040	0.24660E-02
1.060	0.20014E-02
1.080	0.15439E-02
1.100	0.11392E-02
1.120	0.86689E-03
1.140	0.63314E-03
1.160	0.48055E-03
1.180	0.34032E-03
1.200	0.24660E-03
1.220	0.20014E-03
1.240	0.15439E-03
1.260	0.11392E-03
1.280	0.86689E-04
1.300	0.63314E-04
1.320	0.48055E-04
1.340	0.34032E-04
1.360	0.24660E-04
1.380	0.20014E-04
1.400	0.15439E-04
1.420	0.11392E-04
1.440	0.86689E-05
1.460	0.63314E-05
1.480	0.48055E-05
1.500	0.34032E-05
1.520	0.24660E-05
1.540	0.20014E-05
1.560	0.15439E-05
1.580	0.11392E-05
1.600	0.86689E-06
1.620	0.63314E-06
1.640	0.48055E-06
1.660	0.34032E-06
1.680	0.24660E-06
1.700	0.20014E-06
1.720	0.15439E-06
1.740	0.11392E-06
1.760	0.86689E-07
1.780	0.63314E-07
1.800	0.48055E-07
1.820	0.34032E-07
1.840	0.24660E-07
1.860	0.20014E-07
1.880	0.15439E-07
1.900	0.11392E-07
1.920	0.86689E-08
1.940	0.63314E-08
1.960	0.48055E-08
1.980	0.34032E-08
2.000	0.24660E-08
2.020	0.20014E-08
2.040	0.15439E-08
2.060	0.11392E-08
2.080	0.86689E-09
2.100	0.63314E-09
2.120	0.48055E-09
2.140	0.34032E-09
2.160	0.24660E-09
2.180	0.20014E-09
2.200	0.15439E-09
2.220	0.11392E-09
2.240	0.86689E-10
2.260	0.63314E-10
2.280	0.48055E-10
2.300	0.34032E-10
2.320	0.24660E-10
2.340	0.20014E-10
2.360	0.15439E-10
2.380	0.11392E-10
2.400	0.86689E-11
2.420	0.63314E-11
2.440	0.48055E-11
2.460	0.34032E-11
2.480	0.24660E-11
2.500	0.20014E-11
2.520	0.15439E-11
2.540	0.11392E-11
2.560	0.86689E-12
2.580	0.63314E-12
2.600	0.48055E-12
2.620	0.34032E-12
2.640	0.24660E-12
2.660	0.20014E-12
2.680	0.15439E-12
2.700	0.11392E-12
2.720	0.86689E-13
2.740	0.63314E-13
2.760	0.48055E-13
2.780	0.34032E-13
2.800	0.24660E-13
2.820	0.20014E-13
2.840	0.15439E-13
2.860	0.11392E-13
2.880	0.86689E-14
2.900	0.63314E-14
2.920	0.48055E-14
2.940	0.34032E-14
2.960	0.24660E-14
2.980	0.20014E-14
3.000	0.15439E-14
3.020	0.11392E-14
3.040	0.86689E-15
3.060	0.63314E-15
3.080	0.48055E-15
3.100	0.34032E-15
3.120	0.24660E-15
3.140	0.20014E-15
3.160	0.15439E-15
3.180	0.11392E-15
3.200	0.86689E-16
3.220	0.63314E-16
3.240	0.48055E-16
3.260	0.34032E-16
3.280	0.24660E-16
3.300	0.20014E-16
3.320	0.15439E-16
3.340	0.11392E-16
3.360	0.86689E-17
3.380	0.63314E-17
3.400	0.48055E-17
3.420	0.34032E-17
3.440	0.24660E-17
3.460	0.20014E-17
3.480	0.15439E-17
3.500	0.11392E-17
3.520	0.86689E-18
3.540	0.63314E-18
3.560	0.48055E-18
3.580	0.34032E-18
3.600	0.24660E-18
3.620	0.20014E-18
3.640	0.15439E-18
3.660	0.11392E-18
3.680	0.86689E-19
3.700	0.63314E-19
3.720	0.48055E-19
3.740	0.34032E-19
3.760	0.24660E-19
3.780	0.20014E-19
3.800	0.15439E-19
3.820	0.11392E-19
3.840	0.86689E-20
3.860	0.63314E-20
3.880	0.48055E-20
3.900	0.34032E-20
3.920	0.24660E-20
3.940	0.20014E-20
3.960	0.15439E-20
3.980	0.11392E-20
4.000	0.86689E-21
4.020	0.63314E-21
4.040	0.48055E-21
4.060	0.34032E-21
4.080	0.24660E-21
4.100	0.20014E-21
4.120	0.15439E-21
4.140	0.11392E-21
4.160	0.86689E-22
4.180	0.63314E-22
4.200	0.48055E-22
4.220	0.34032E-22
4.240	0.24660E-22
4.260	0.20014E-22
4.280	0.15439E-22
4.300	0.11392E-22
4.320	0.86689E-23
4.340	0.63314E-23
4.360	0.48055E-23
4.380	0.34032E-23
4.400	0.24660E-23
4.420	0.20014E-23
4.440	0.15439E-23
4.460	0.11392E-23
4.480	0.86689E-24
4.500	0.63314E-24
4.520	0.48055E-24
4.540	0.34032E-24
4.560	0.24660E-24
4.580	0.20014E-24
4.600	0.15439E-24
4.620	0.11392E-24
4.640	0.86689E-25
4.660	0.63314E-25
4.680	0.48055E-25
4.700	0.34032E-25
4.720	0.24660E-25
4.740	0.20014E-25
4.760	0.15439E-25
4.780	0.11392E-25
4.800	0.86689E-26
4.820	0.63314E-26
4.840	0.48055E-26
4.860	0.34032E-26
4.880	0.24660E-26
4.900	0.20014E-26
4.920	0.15439E-26
4.940	0.11392E-26
4.960	0.86689E-27
4.980	0.63314E-27
5.000	0.48055E-27
5.020	0.34032E-27
5.040	0.24660E-27
5.060	0.20014E-27
5.080	0.15439E-27
5.100	0.11392E-27
5.120	0.86689E-28
5.140	0.63314E-28
5.160	0.48055E-28
5.180	0.34032E-28
5.200	0.24660E-28
5.220	0.20014E-28
5.240	0.15439E-28
5.260	0.11392E-28
5.280	0.86689E-29
5.300	0.63314E-29
5.320	0.48055E-29
5.340	0.34032E-29
5.360	0.24660E-29
5.380	0.20014E-29
5.400	0.15439E-29
5.420	0.11392E-29
5.440	0.86689E-30
5.460	0.63314E-30
5.480	0.48055E-30
5.500	0.34032E-30
5.520	0.24660E-30
5.540	0.20014E-30
5.560	0.15439E-30
5.580	0.11392E-30
5.600	0.86689E-31
5.620	0.63314E-31
5.640	0.48055E-31
5.660	0.34032E-31
5.680	0.24660E-31
5.700	0.20014E-31
5.720	0.15439E-31
5.740	0.11392E-31
5.760	0.86689E-32
5.780	0.63314E-32
5.800	0.48055E-32
5.820	0.34032E-32
5.840	0.24660E-32
5.860	0.20014E-32
5.880	0.15439E-32
5.900	0.11392E-32
5.920	0.86689E-33
5.940	0.63314E-33
5.960	0.48055E-33
5.980	0.34032E-33
6.000	0.24660E-33
6.020	0.20014E-33
6.040	0.15439E-33
6.060	0.11392E-33
6.080	0.86689E-34
6.100	0.63314E-34
6.120	0.48055E-34
6.140	0.34032E-34
6.160	0.24660E-34
6.180	0.20014E-34
6.200	0.15439E-34
6.220	0.11392E-34
6.240	0.86689E-35
6.260	0.63314E-35
6.280	0.48055E-35
6.300	0.34032E-35
6.320	0.24660E-35
6.340	0.20014E-35
6.360	0.15439E-35
6.380	0.11392E-35
6.400	0.86689E-36
6.420	0.63314E-36
6.440	0.48055E-36
6.460	0.34032E-36
6.480	0.24660E-36
6.500	0.20014E-36
6.520	0.15439E-36
6.540	0.11392E-36
6.560	0.86689E-37
6.580	0.63314E-37
6.600	0.48055E-37
6.620	0.34032E-37
6.640	0.24660E-37
6.660	0.20014E-37
6.680	0.15439E-37
6.700	0.11

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SOIL HORIZON NUMBER 172

0 MEASURED :

0 PREDICTED

SUM OF (ABS(LOG(P<sub>SIH</sub>)-LOG(P<sub>SIP</sub>))) = 0.28935E+01

SOIL HORIZON NUMBER 173 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.85 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.087	0.150F+05
0.102	0.600F+04
0.126	0.200F+04
0.174	0.100F+04
0.191	0.330F+03
0.207	0.100F+03
0.211	0.600F+02
0.253	0.200F+02

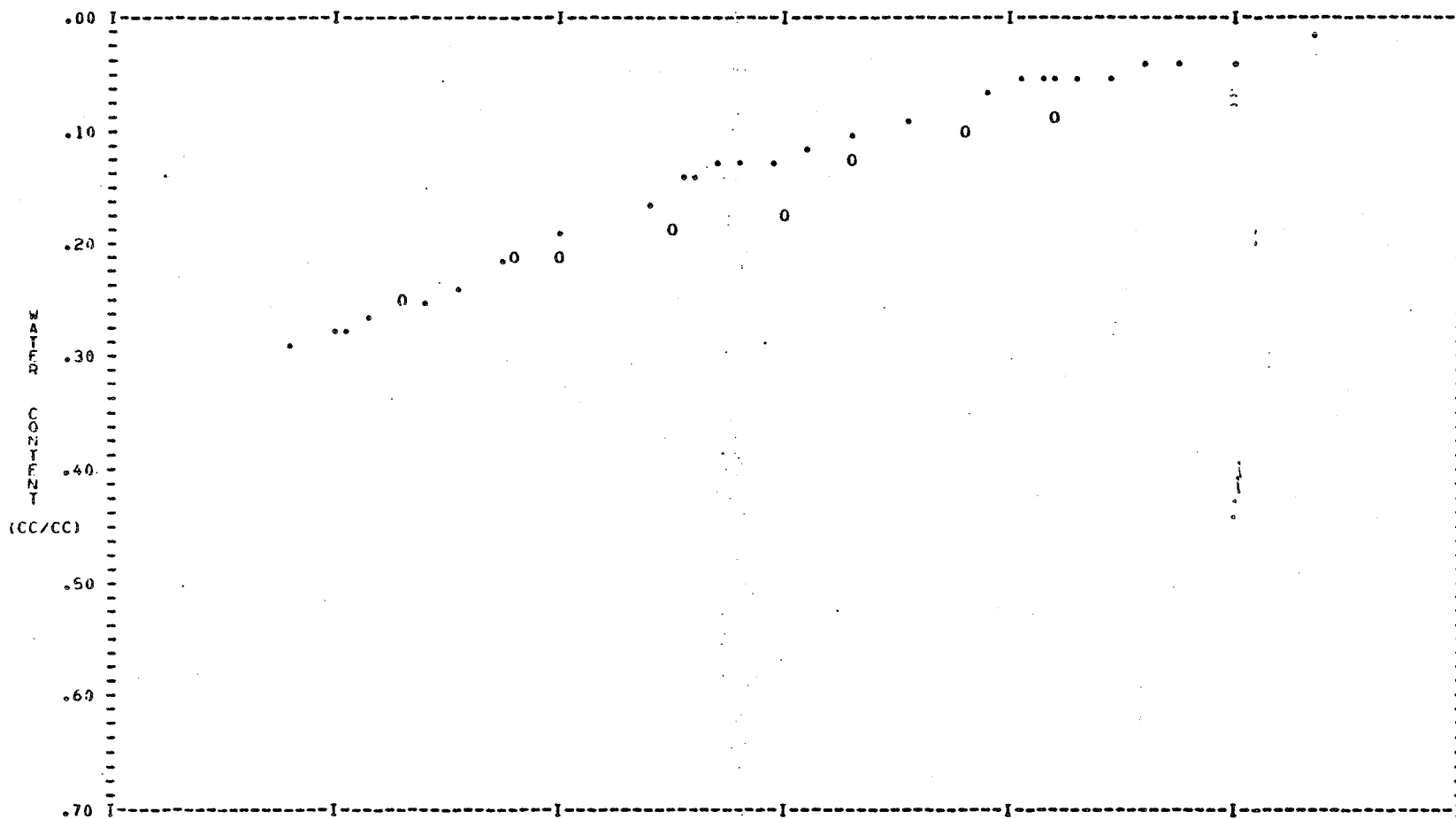
PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	10.0	0.100
2.00	11.5	0.015
3.00	12.6	0.011
4.00	13.6	0.010
5.00	14.5	0.009
6.00	15.4	0.009
7.00	16.3	0.009
8.00	17.1	0.008
9.00	17.9	0.008
10.00	18.6	0.007
20.00	24.9	0.063
30.00	30.8	0.059
40.00	35.7	0.049
50.00	39.0	0.033
60.00	40.9	0.019
70.00	42.1	0.012
80.00	43.2	0.011
90.00	44.5	0.013
100.00	46.2	0.017
200.00	59.9	0.137
300.00	62.3	0.025
400.00	74.4	0.061
500.00	79.1	0.047
600.00	82.7	0.036
700.00	85.6	0.029
800.00	88.0	0.024
900.00	90.1	0.021
1000.00	91.9	0.018
2000.00	100.0	0.081

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.017	0.23454E+06
0.036	0.98141E+05
0.039	0.57153E+05
0.043	0.38103E+05
0.045	0.27528E+05
0.048	0.20981E+05
0.050	0.16614E+05
0.052	0.13539E+05
0.055	0.11284E+05
0.066	0.82522E+04
0.084	0.36588E+04
0.088	0.20784E+04
0.090	0.13066E+04
0.092	0.85158E+03
0.094	0.60191E+03
0.096	0.47663E+03
0.098	0.40420E+03
0.099	0.35306E+03
0.100	0.25735E+03
0.105	0.10537E+03
0.120	0.58371E+02
0.122	0.37406E+02
0.124	0.26019E+02
0.126	0.19159E+02
0.128	0.14776E+02
0.130	0.11798E+02
0.132	0.96761E+01
0.135	0.62716E+01
0.290	

ALPHA = 1.38

[illegible]

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.30772E+01

SOIL HORIZON NUMBER 174 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.12 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.045	0.150E+05
0.047	0.600E+04
0.053	0.200E+04
0.189	0.100E+04
0.206	0.330E+03
0.242	0.100E+03
0.279	0.600E+02
0.445	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	2.1	0.021
2.00	2.4	0.003
3.00	2.7	0.003
4.00	3.1	0.004
5.00	3.4	0.003
6.00	3.7	0.003
7.00	4.0	0.003
8.00	4.3	0.002
9.00	4.5	0.002
10.00	4.7	0.002
20.00	5.9	0.012
30.00	5.5	0.006
40.00	7.9	0.014
50.00	10.2	0.023
60.00	16.5	0.063
70.00	26.0	0.095
80.00	35.3	0.093
90.00	43.1	0.078
100.00	48.0	0.058
200.00	80.4	0.315
300.00	87.7	0.073
400.00	88.7	0.010
500.00	90.0	0.013
600.00	92.2	0.022
700.00	94.2	0.020
800.00	95.0	0.017
900.00	97.1	0.012
1000.00	97.9	0.008
2000.00	100.0	0.021

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.007	0.99310E+05
0.015	0.44163E+05
0.017	0.26546E+05
0.019	0.17647E+05
0.021	0.12619E+05
0.022	0.94994E+04
0.024	0.74271E+04
0.025	0.59771E+04
0.026	0.49207E+04
0.031	0.34065E+04
0.036	0.13497E+04
0.042	0.91893E+03
0.052	0.68257E+03
0.077	0.60397E+03
0.123	0.50205E+03
0.177	0.39992E+03
0.227	0.31766E+03
0.266	0.25171E+03
0.373	0.16969E+03
0.485	0.57673E+02
0.509	0.23073E+02
0.516	0.16581E+02
0.526	0.13265E+02
0.538	0.10083E+02
0.549	0.77568E+01
0.557	0.60216E+01
0.563	0.46638E+01
0.571	0.27303E+01

ALPHA = 1.38



SOIL HORIZON NUMBER 175 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.27 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.032	0.150E+05
0.043	0.600E+04
0.055	0.200E+04
0.099	0.100E+04
0.124	0.330E+03
0.272	0.100E+03
0.321	0.600E+02
0.424	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	3.7	0.037
2.00	4.2	0.005
3.00	4.6	0.004
4.00	5.0	0.004
5.00	5.4	0.004
6.00	5.8	0.003
7.00	6.1	0.003
8.00	6.4	0.003
9.00	6.6	0.002
10.00	6.8	0.002
20.00	8.2	0.014
30.00	8.8	0.006
40.00	10.0	0.012
50.00	12.1	0.021
60.00	18.1	0.060
70.00	27.3	0.091
80.00	26.3	0.090
90.00	43.9	0.076
100.00	49.6	0.057
200.00	81.7	0.321
300.00	89.1	0.074
400.00	89.8	0.007
500.00	90.9	0.011
600.00	92.3	0.019
700.00	94.5	0.017
800.00	96.0	0.014
900.00	97.1	0.011
1000.00	97.8	0.008
2000.00	100.0	0.022

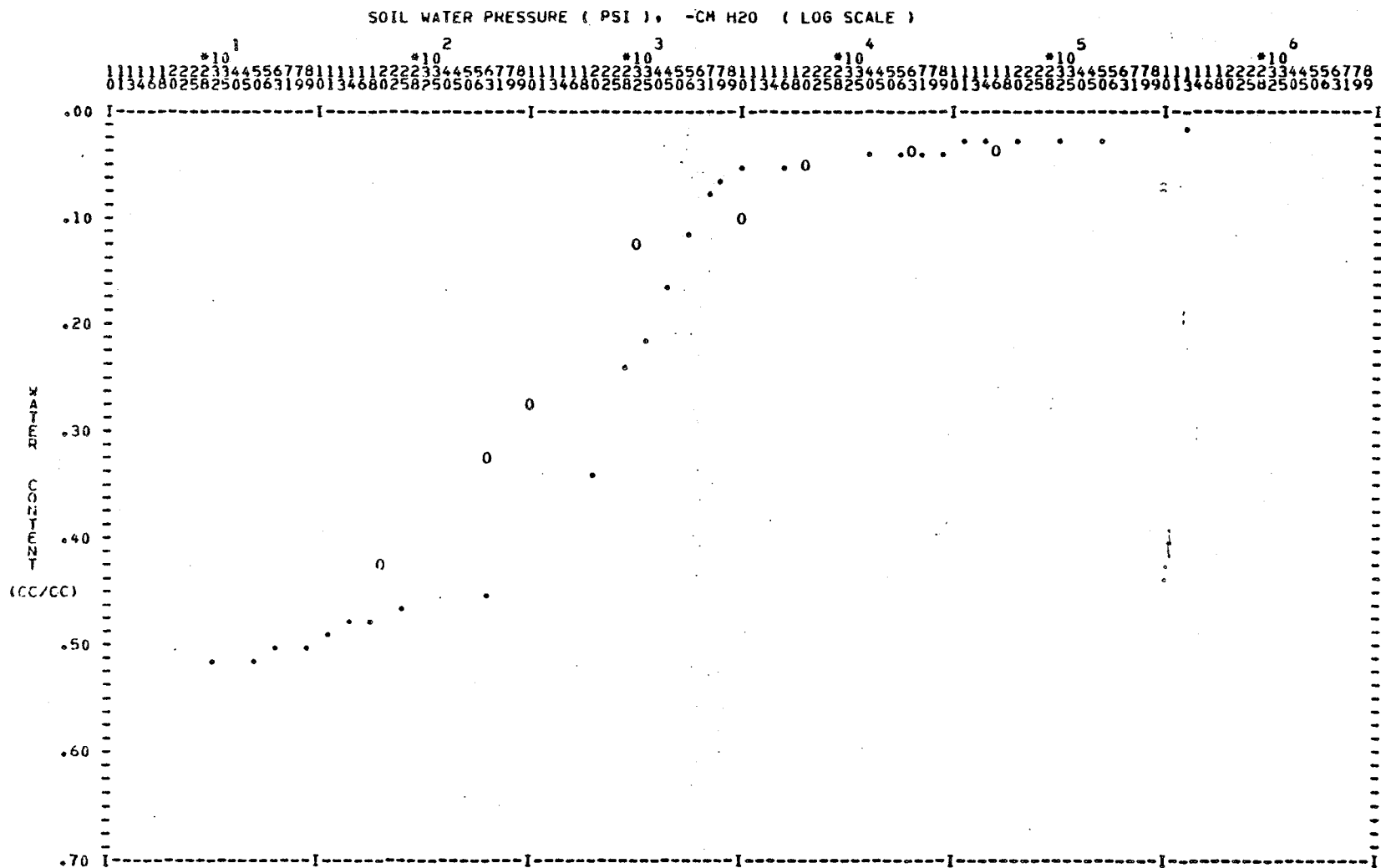
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.011	0.11931E+06
0.023	0.51815E+05
0.025	0.30631E+05
0.027	0.20301E+05
0.029	0.14483E+05
0.031	0.10890E+05
0.032	0.85066E+04
0.034	0.68447E+04
0.035	0.56339E+04
0.039	0.39027E+04
0.044	0.14971E+04
0.049	0.10057E+04
0.053	0.75210E+03
0.079	0.67080E+03
0.118	0.55883E+03
0.165	0.44572E+03
0.209	0.33458E+03
0.243	0.28164E+03
0.342	0.19095E+03
0.445	0.64733E+02
0.466	0.24659E+02
0.471	0.17924E+02
0.473	0.14489E+02
0.488	0.10980E+02
0.496	0.84532E+01
0.503	0.65327E+01
0.507	0.51380E+01
0.515	0.30885E+01

ALPHA = 1.38



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SOIL HORIZON NUMBER 176 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.47 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.021	0.150E+05
0.031	0.600E+04
0.041	0.200E+04
0.072	0.100E+04
0.113	0.330E+03
0.209	0.100E+03
0.262	0.600E+02
0.351	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	2.5	0.025
2.00	2.6	0.001
3.00	2.8	0.002
4.00	3.1	0.003
5.00	3.4	0.003
6.00	3.6	0.003
7.00	3.8	0.002
8.00	4.1	0.002
9.00	4.3	0.002
10.00	4.4	0.002
20.00	5.6	0.012
30.00	6.9	0.013
40.00	10.4	0.035
50.00	15.3	0.054
60.00	23.5	0.077
70.00	32.3	0.088
80.00	40.5	0.082
90.00	47.4	0.069
100.00	52.9	0.055
200.00	86.3	0.334
300.00	92.9	0.066
400.00	93.2	0.003
500.00	93.8	0.006
600.00	95.0	0.012
700.00	96.1	0.011
800.00	97.0	0.009
900.00	97.7	0.007
1000.00	98.2	0.005
2000.00	100.0	0.018

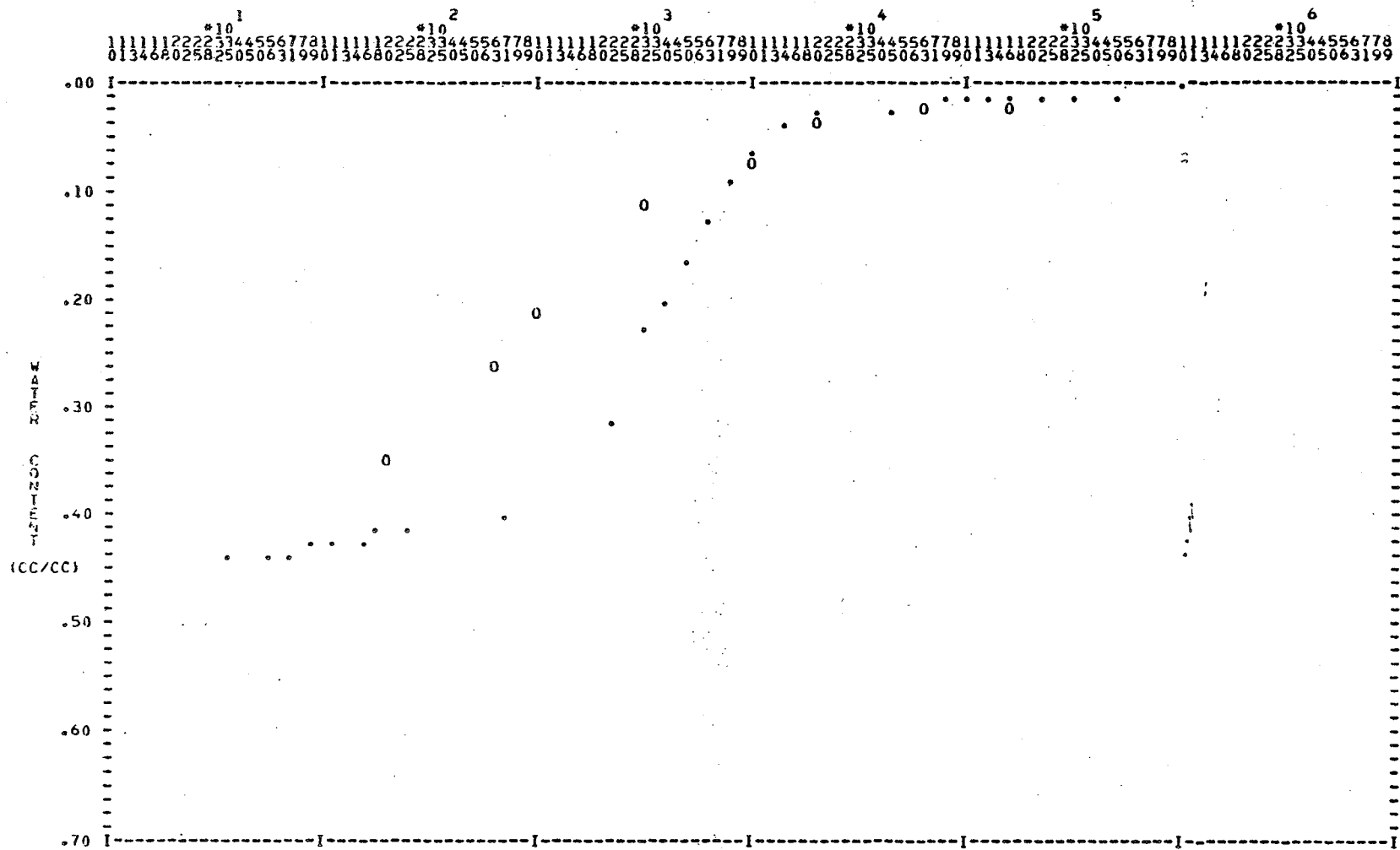
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.006	0.10478E+06
0.012	0.52250E+05
0.013	0.32873E+05
0.014	0.22149E+05
0.015	0.15949E+05
0.017	0.12062E+05
0.018	0.94626E+04
0.019	0.76359E+04
0.019	0.63009E+04
0.022	0.43980E+04
0.023	0.20238E+04
0.039	0.14249E+04
0.058	0.10482E+04
0.088	0.81888E+03
0.124	0.64525E+03
0.162	0.50862E+03
0.196	0.40514E+03
0.223	0.32552E+03
0.310	0.22384E+03
0.399	0.73838E+02
0.414	0.23973E+02
0.416	0.18515E+02
0.420	0.15460E+02
0.425	0.11671E+02
0.430	0.89972E+01
0.433	0.70556E+01
0.436	0.55889E+01
0.441	0.34590E+01

ALPHA = 1.38

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SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 176

O MEASURED :      . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.35203E+01

SOIL HORIZON NUMBER 177 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.55 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.107	0.150E+05
0.126	0.600E+04
0.146	0.200E+04
0.135	0.100E+04
0.195	0.330E+03
0.222	0.100E+03
0.274	0.600E+02
0.338	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	14.1	0.141
2.00	14.7	0.006
3.00	15.1	0.004
4.00	15.5	0.004
5.00	15.8	0.003
6.00	16.1	0.003
7.00	16.4	0.003
8.00	16.6	0.002
9.00	16.8	0.002
10.00	17.0	0.002
20.00	18.1	0.011
30.00	18.2	0.001
40.00	18.8	0.006
50.00	20.6	0.018
60.00	26.0	0.054
70.00	34.3	0.082
80.00	42.5	0.083
90.00	49.7	0.072
100.00	55.3	0.056
200.00	91.1	0.358
300.00	97.2	0.062
400.00	97.3	0.000
500.00	97.4	0.001
600.00	97.9	0.005
700.00	98.3	0.004
800.00	98.7	0.004
900.00	99.0	0.003
1000.00	99.2	0.002
2000.00	100.0	0.008

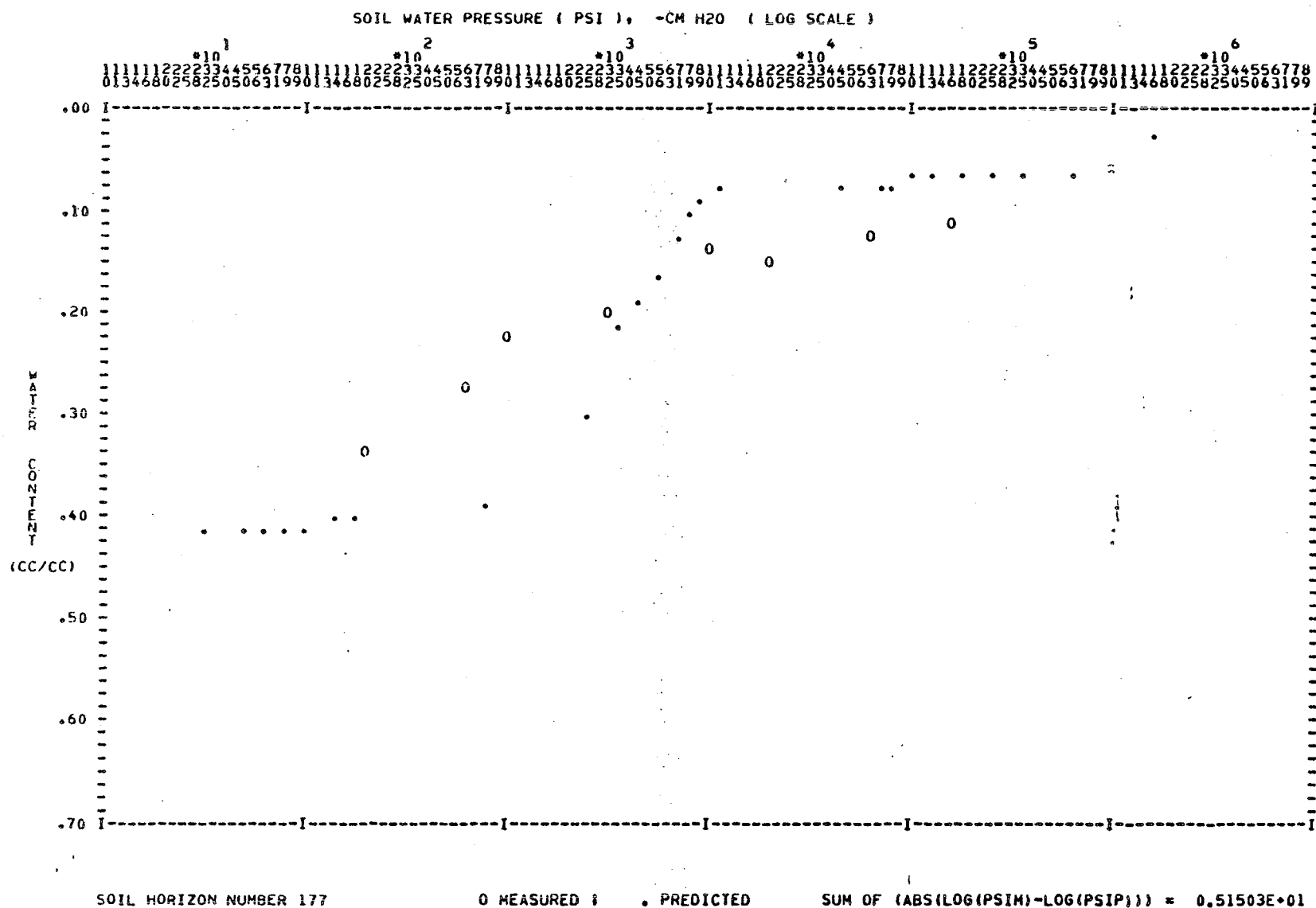
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.031	0.15123E+06
0.062	0.63989E+05
0.064	0.37114E+05
0.065	0.24374E+05
0.066	0.17325E+05
0.067	0.12999E+05
0.068	0.10144E+05
0.069	0.81537E+04
0.070	0.67086E+04
0.073	0.46592E+04
0.075	0.11556E+04
0.077	0.11027E+04
0.082	0.90597E+03
0.097	0.81457E+03
0.125	0.67817E+03
0.159	0.54234E+03
0.191	0.43350E+03
0.218	0.34718E+03
0.304	0.24117E+03
0.391	0.77494E+02
0.404	0.17866E+02
0.404	0.14531E+02
0.405	0.13903E+02
0.407	0.10433E+02
0.409	0.80472E+01
0.410	0.63391E+01
0.411	0.50679E+01
0.413	0.31534E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 178 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.11 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.038	0.150E+05
0.039	0.600E+04
0.042	0.200E+04
0.213	0.100E+04
0.249	0.330E+03
0.292	0.100E+03
0.315	0.600E+02
0.490	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	0.9	0.009
2.00	1.5	0.006
3.00	2.1	0.006
4.00	2.8	0.007
5.00	3.5	0.007
6.00	4.1	0.006
7.00	4.7	0.006
8.00	5.2	0.005
9.00	5.7	0.005
10.00	6.1	0.004
20.00	9.0	0.029
30.00	12.0	0.030
40.00	16.2	0.042
50.00	21.1	0.049
60.00	27.9	0.068
70.00	35.8	0.079
80.00	43.1	0.073
90.00	49.0	0.059
100.00	53.4	0.044
200.00	76.4	0.230
300.00	82.8	0.064
400.00	85.9	0.031
500.00	88.5	0.026
600.00	90.9	0.024
700.00	93.1	0.021
800.00	94.9	0.018
900.00	96.3	0.015
1000.00	97.5	0.012
2000.00	100.0	0.025

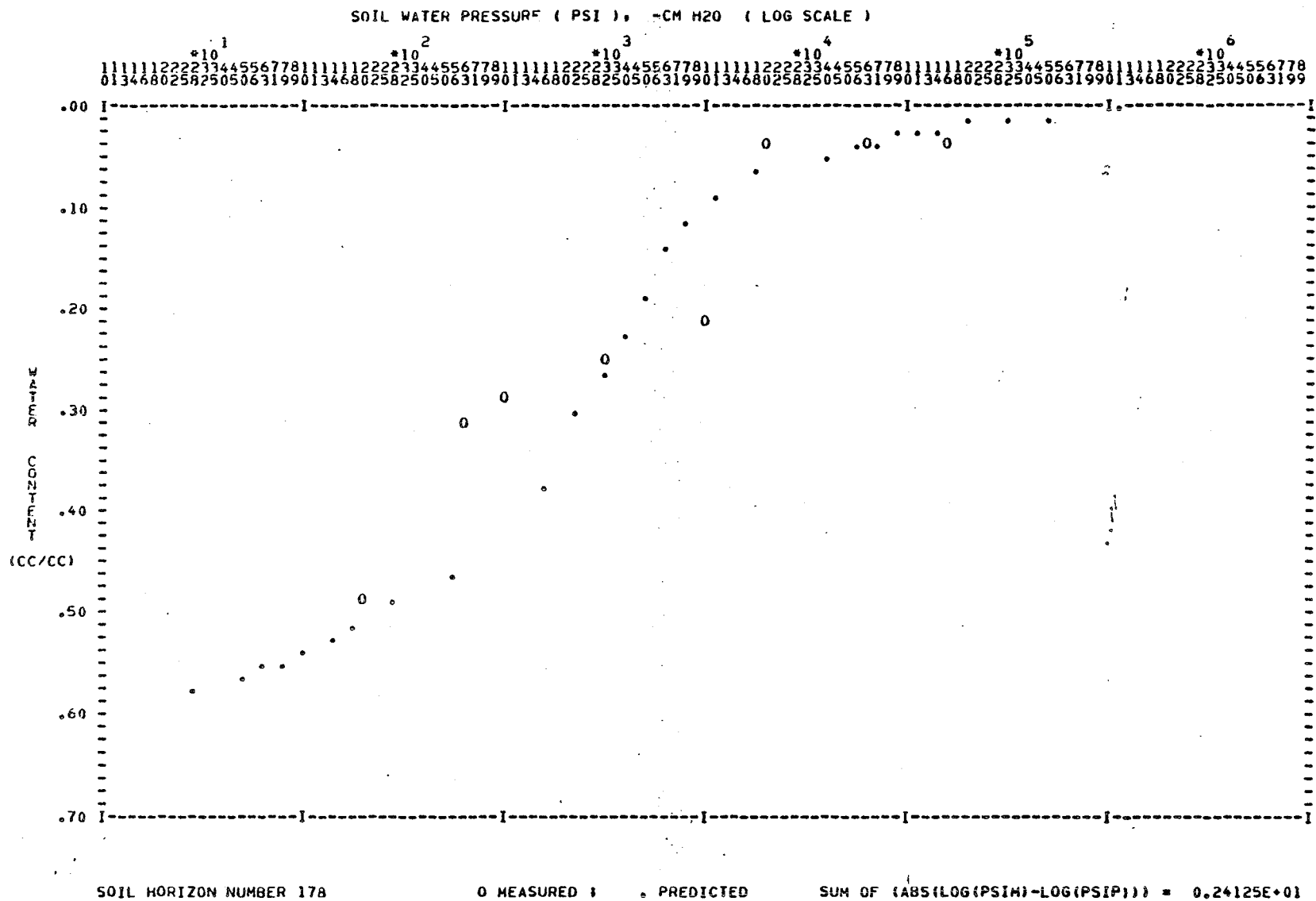
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.004	0.10808E+06
0.010	0.49023E+05
0.014	0.29857E+05
0.018	0.19973E+05
0.022	0.14347E+05
0.025	0.10841E+05
0.029	0.85053E+04
0.031	0.68665E+04
0.034	0.56700E+04
0.044	0.39800E+04
0.061	0.17918E+04
0.082	0.11294E+04
0.108	0.78202E+03
0.142	0.60799E+03
0.185	0.48153E+03
0.229	0.37843E+03
0.268	0.29912E+03
0.298	0.23698E+03
0.377	0.15856E+03
0.462	0.55848E+02
0.490	0.28710E+02
0.507	0.18646E+02
0.521	0.13443E+02
0.535	0.10112E+02
0.546	0.78189E+01
0.556	0.61768E+01
0.563	0.49566E+01
0.574	0.28005E+01

ALPHA = 1.38

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SOIL HORIZON NUMBER 179 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.30 G/CM\*\*3

PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC) SOIL WATER PRESSURE (-CM H2O)

0.040	0.150E+05
0.048	0.600E+04
0.057	0.200E+04
0.195	0.100E+04
0.224	0.330E+03
0.296	0.100E+03
0.311	0.600E+02
0.467	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. ( MICROMETERS ) PERCENT PARTICLES LESS THAN DIAM. INTERVAL FRACTION ( G/G )

1.00	4.4	0.044
2.00	4.9	0.005
3.00	5.5	0.006
4.00	6.1	0.007
5.00	6.8	0.007
6.00	7.4	0.006
7.00	8.0	0.006
8.00	8.5	0.005
9.00	8.9	0.005
10.00	9.3	0.004
20.00	12.2	0.029
30.00	15.3	0.031
40.00	19.5	0.043
50.00	24.4	0.048
60.00	30.9	0.065
70.00	38.5	0.075
80.00	45.4	0.069
90.00	50.9	0.056
100.00	55.0	0.041
200.00	75.0	0.209
300.00	82.1	0.062
400.00	85.1	0.031
500.00	87.7	0.026
600.00	90.1	0.024
700.00	92.3	0.022
800.00	94.2	0.019
900.00	95.7	0.015
1000.00	96.9	0.012
2000.00	100.0	0.031

PREDICTED MOISTURE CHARACTERISTIC DATA

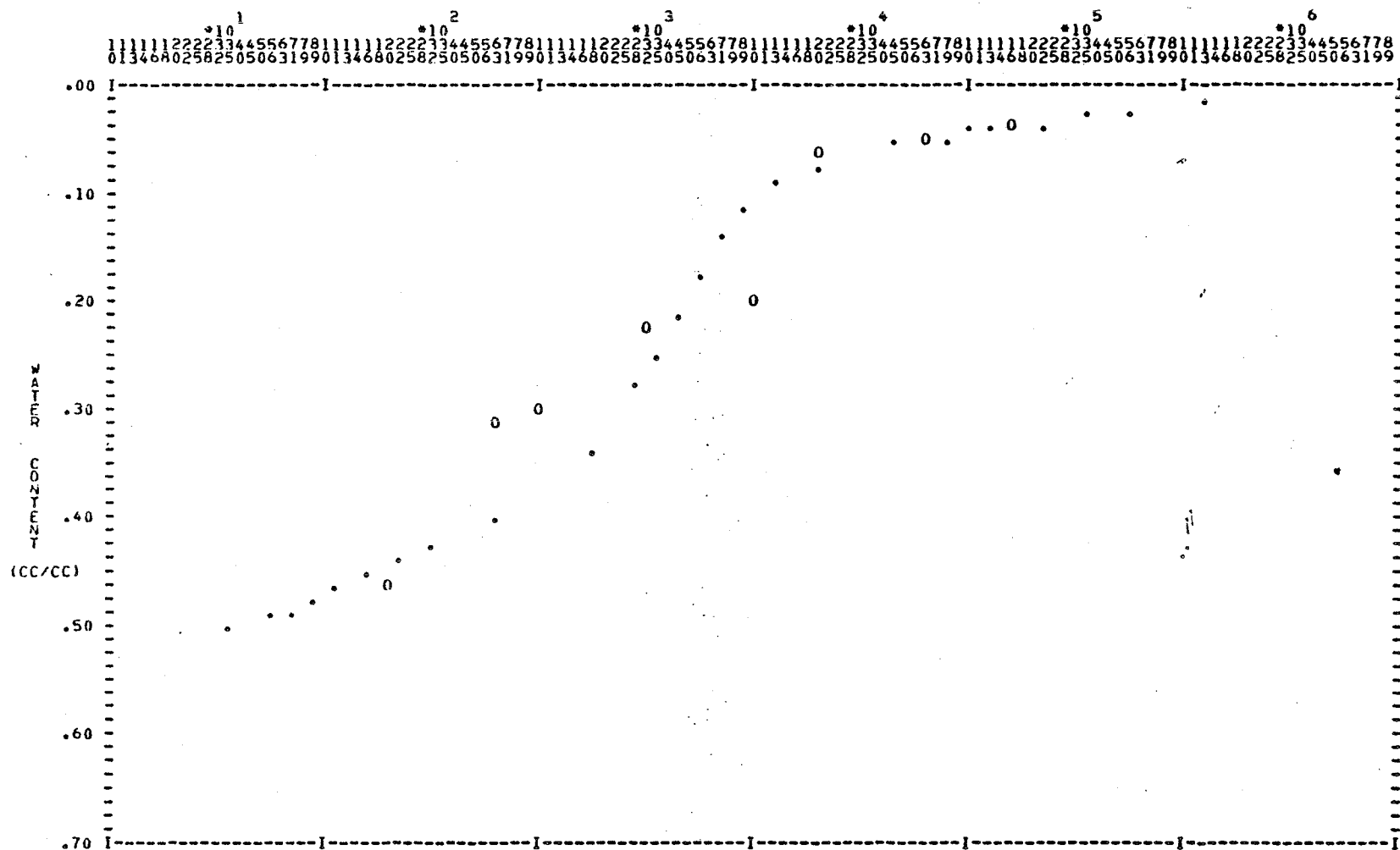
SOIL WATER CONTENT ( CC/CC ) SOIL WATER PRESSURE ( -CM H2O )

0.012	0.12373E+06
0.026	0.56191E+05
0.030	0.34255E+05
0.033	0.22929E+05
0.036	0.16478E+05
0.039	0.12457E+05
0.042	0.97769E+04
0.044	0.78951E+04
0.046	0.65226E+04
0.055	0.45859E+04
0.070	0.20854E+04
0.089	0.13093E+04
0.112	0.90213E+03
0.141	0.69743E+03
0.177	0.55137E+03
0.214	0.43283E+03
0.245	0.34169E+03
0.270	0.27021E+03
0.333	0.18002E+03
0.402	0.64055E+02
0.426	0.33054E+02
0.440	0.21532E+02
0.453	0.15575E+02
0.465	0.11729E+02
0.475	0.90784E+01
0.484	0.71794E+01
0.491	0.57685E+01
0.502	0.33720E+01

ALPHA = 1.38



SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



SOIL HORIZON NUMBER 179

MEASURED :

PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.19874E+01

SOIL HORIZON NUMBER 180 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.56 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT SOIL WATER PRESSURE  
(CC/CC) (-CM H2O)

0.070	0.150E+05
0.081	0.600E+04
0.095	0.200E+04
0.147	0.100E+04
0.187	0.330E+03
0.226	0.100E+03
0.265	0.600E+02
0.276	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. PERCENT PARTICLES INTERVAL FRACTION  
( MICROMETERS ) LESS THAN DIAM. ( G/G )

1.00	9.0	0.090
2.00	9.6	0.006
3.00	10.2	0.006
4.00	10.9	0.007
5.00	11.6	0.007
6.00	12.3	0.006
7.00	12.9	0.006
8.00	13.4	0.005
9.00	13.9	0.005
10.00	14.4	0.005
20.00	17.5	0.031
30.00	21.1	0.036
40.00	25.8	0.047
50.00	30.7	0.049
60.00	37.5	0.068
70.00	45.5	0.080
80.00	52.7	0.072
90.00	58.4	0.057
100.00	62.4	0.040
200.00	80.7	0.183
300.00	85.6	0.048
400.00	88.1	0.025
500.00	90.1	0.020
600.00	91.9	0.018
700.00	93.5	0.016
800.00	94.9	0.014
900.00	96.0	0.012
1000.00	97.0	0.010
2000.00	100.0	0.030

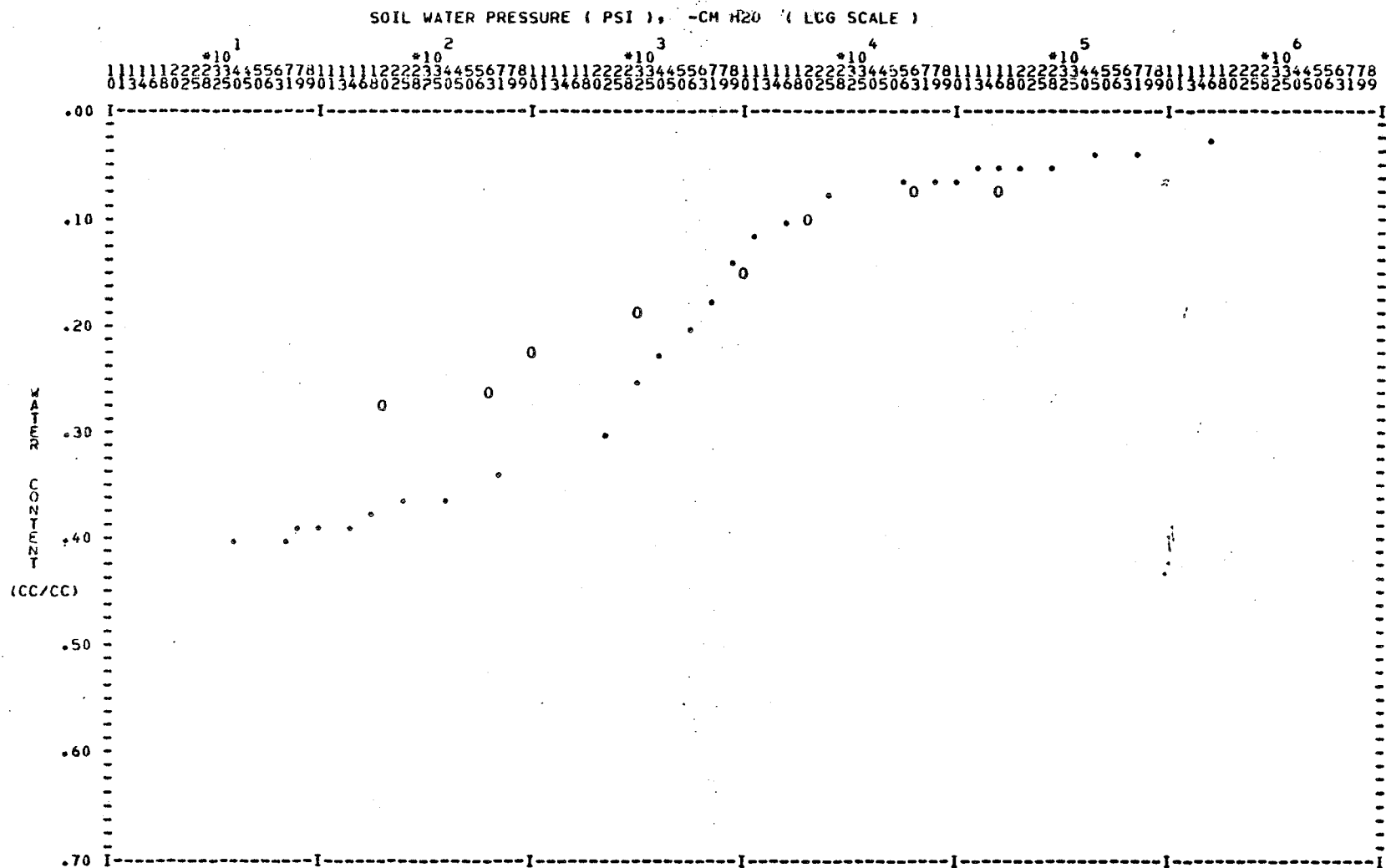
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT SOIL WATER PRESSURE  
( CC/CC ) ( -CM H2O )

0.020	0.15351E+06
0.041	0.69537E+05
0.044	0.42349E+05
0.046	0.28345E+05
0.049	0.20372E+05
0.052	0.15405E+05
0.054	0.12043E+05
0.056	0.97684E+04
0.058	0.80711E+04
0.066	0.56810E+04
0.079	0.26123E+04
0.096	0.16238E+04
0.116	0.11050E+04
0.140	0.85668E+03
0.171	0.67974E+03
0.202	0.53273E+03
0.229	0.41850E+03
0.249	0.32763E+03
0.294	0.21407E+03
0.342	0.174540E+03
0.357	0.138745E+03
0.366	0.125138E+03
0.374	0.117959E+03
0.381	0.113458E+03
0.387	0.10437E+03
0.393	0.83111E+02
0.397	0.67557E+02
0.405	0.40853E+02

ALPHA = 1.38

B-361



SOIL HORIZON NUMBER 181 ( SEE TABLE 4 FOR IDENTIFICATION )

DENSITY DATA:

BULK DENSITY = 1.58 G/CM\*\*3  
PARTICLE DENSITY = 2.65 G/CM\*\*3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.049	0.150E+05
0.062	0.000E+04
0.071	0.200E+04
0.143	0.100E+04
0.167	0.330E+03
0.205	0.100E+03
0.229	0.600E+02
0.239	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

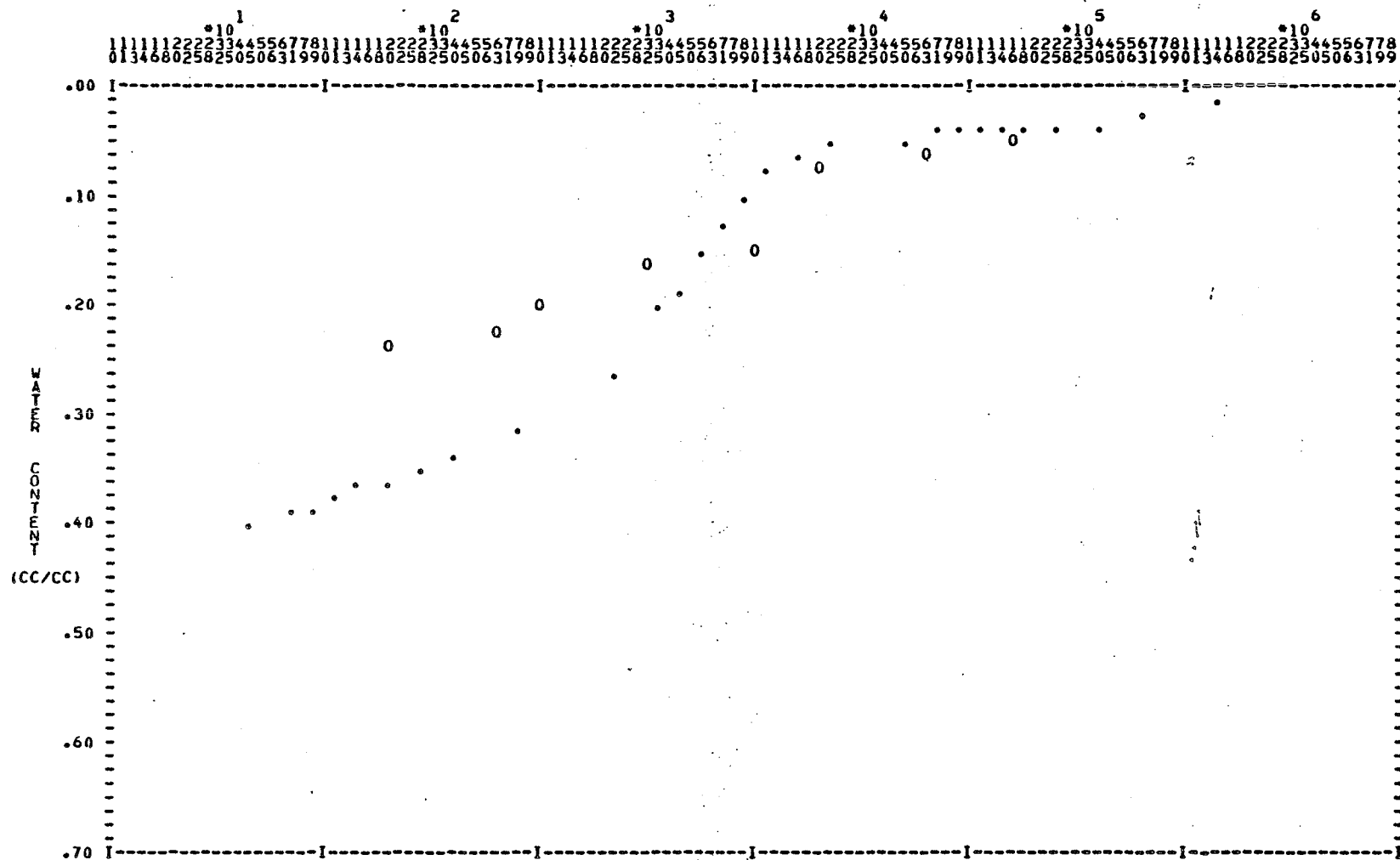
UPPER PARTICLE DIAM. ( MICROMETERS )	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION ( G/G )
1.00	7.2	0.072
2.00	7.5	0.003
3.00	7.8	0.003
4.00	8.3	0.004
5.00	8.7	0.004
6.00	9.1	0.004
7.00	9.4	0.003
8.00	9.7	0.003
9.00	10.0	0.003
10.00	10.3	0.003
20.00	11.0	0.017
30.00	11.8	0.018
40.00	11.0	0.031
50.00	21.0	0.040
60.00	27.3	0.063
70.00	35.0	0.077
80.00	42.2	0.072
90.00	48.1	0.059
100.00	52.4	0.043
200.00	75.4	0.230
300.00	81.9	0.064
400.00	85.0	0.031
500.00	87.6	0.026
600.00	89.9	0.023
700.00	92.0	0.020
800.00	93.7	0.017
900.00	95.2	0.015
1000.00	96.4	0.012
2000.00	100.0	0.036

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT ( CC/CC )	SOIL WATER PRESSURE ( -CM H2O )
0.015	0.13605E+06
0.031	0.63227E+05
0.033	0.38889E+05
0.034	0.26060E+05
0.036	0.18721E+05
0.037	0.14141E+05
0.039	0.11086E+05
0.040	0.89426E+04
0.041	0.73776E+04
0.045	0.51518E+04
0.052	0.23427E+04
0.062	0.15267E+04
0.077	0.10793E+04
0.097	0.85742E+03
0.126	0.68571E+03
0.156	0.54044E+03
0.182	0.42751E+03
0.203	0.33847E+03
0.258	0.22710E+03
0.318	0.79959E+02
0.337	0.41133E+02
0.349	0.26616E+02
0.358	0.19110E+02
0.367	0.14326E+02
0.375	0.11107E+02
0.381	0.88375E+01
0.387	0.71750E+01
0.397	0.42960E+01

ALPHA = 1.38

SOIL WATER PRESSURE ( PSI ), -CM H2O ( LOG SCALE )



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